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LETTER OF TRANSMITTAL

TO: HCDEH
100 H St., Suite 100
Eureka, CA 95501
ATTN: Mark Verhey

DATE: November 28, 2005
JOB NO.: 3888.02
PROJECT: Blue Lake Market

TRANSMITTED BY: ☒ Mail ☐ Delivered In Person ☐ Fax

No. Copies		Description
1	1.	Report of Findings: Boring and Monitoring Well Installation
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REMARKS:

THIS MATERIAL SENT FOR: ☒ As Requested ☒ Information ☐ Approval ☐

cc: Pat Folkins

By: Timothy D. Nelson

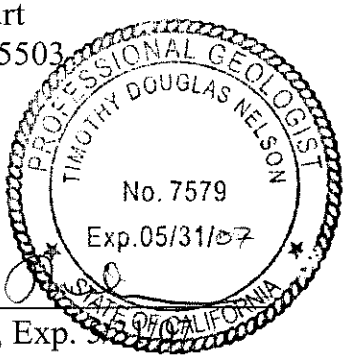
21 W. 4th Street · P.O. Box 1023 · Eureka, California 95502 · 707-443-5054 · 1-800-515-5054 · FAX 707-443-0553
www.lacoassociates.us

REPORT OF FINDINGS: BORING AND MONITORING WELL INSTALLATION

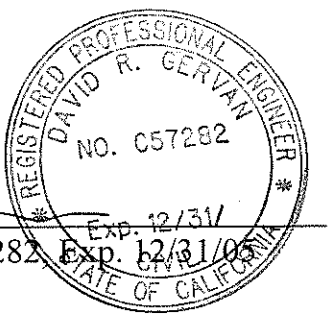
Blue Lake Market
410 Railroad Avenue
Blue Lake, California

LOP NO. 12229

Prepared for:
Pat Folkins
2020 Ardagh Court
Eureka, California 95503



Timothy D. Nelson, PG 7579, Exp. 5/31/07



David R. Gervan, RCE 57282, Exp. 12/31/05

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November 28, 2005
Project No. 3888.02

TABLE OF CONTENTS

REPORT OF FINDINGS:
BORING AND MONITORING WELL INSTALLATION

Blue Lake Market; 410 Railroad Avenue, Blue Lake, California

LOP No. 12229; LACO Project No. 3888.02

EXECUTIVE SUMMARY

Additional fieldwork to evaluate soil and groundwater contamination presumed to originate from the former 550-gallon underground storage tank (UST) at the Blue Lake Market (hereafter referred to as the "market site") was conducted in September 2005. The market site is located at 410 Railroad Avenue, Blue Lake, California. The current owner and responsible party for cleanup is Mr. Patrick Folkins. The site is presently an active retail market. No active USTs or fueling dispensers are located at the market site. A site location map is presented as Figure 1. The work activities were performed in general accordance with LACO ASSOCIATES' (LACO's) *Interim Remedial Action Plan and Supplemental Boring Installation Workplan* (IRAP), dated November 18, 2004, and *Revised Boring/Monitoring Well Location Map* (Addendum), dated June 22, 2005. The IRAP and Addendum were approved by the Humboldt County Division of Environmental Health (HCDEH) in correspondence dated December 23, 2004, and in a meeting with the HCDEH on June 17, 2005. During the current investigation, LACO performed the installation of four temporary borings (B11 through B14) and two permanent monitoring wells (MW4 and MW5) in the presumed down-gradient direction of the market site using direct push technology. At each of the four boring locations, soil and grab groundwater samples were collected. Soil samples were also collected during the installation of monitoring wells.

There is another former UST site (Blue Lake Belting and Leather Works [BLW site], LOP No. 12012) located immediately up-gradient of the market site at 411 Railroad Avenue. Three USTs (one 1,000-gallon, one 750-gallon, and one 650-gallon) were formerly in operation at the BLW site.

It appears that the petroleum hydrocarbon plume originating from the BLW site is compounding the concentrations of contamination at the market site during seasonal gradient direction fluctuations to the southwest. Based on the distribution of contaminants originating from both sites, it appears that a

strong hydraulic gradient direction to the southeast is not present at the site. It appears that the dominant hydraulic gradient direction is toward the south-southwestern extent of Powers Creek. Analytical results and gradient calculations in newly installed monitoring wells MW4 and MW5 will provide more information regarding these observations.

Recommendations include:

- The submittal of a brief letter workplan outlining the installation of four temporary borings in Railroad Avenue to determine the mass flux of contaminants in soil and groundwater migrating onto the market site from the BLW site that are compounding contaminant concentrations at the market site. The borings will be installed up gradient of monitoring well MW2 and between monitoring wells MW2 and MW3. LACO will submit a brief letter report of findings for the boring installation.
- The submittal of a limited site conceptual model including updated cross-sections to support the assumptions discussed in the *Fate and Transport* section of this report.
- The submittal of a limited Contamination Assessment Plan/feasibility study (CAP) that addresses three remedial alternatives, feasibility, costs, and the selected alternative. After the CAP is approved by the HCDEH, submit a Remedial Action Plan (RAP) Addendum to the previously submitted RAP dated November 18, 2004. Modify the mass calculations in the RAP Addendum as appropriate.
- After the RAP Addendum is approved by the HCDEH, implement the selected remedial alternative, if appropriate.

INTRODUCTION

The purpose of the current investigation was to further delineate petroleum hydrocarbons in soil and groundwater in the area adjacent to the former pump island dispenser and UST (primary sources), and in the areas southwest to southeast of the primary sources. This Report of Findings contains details of the September 2005 boring and monitoring well installation, sampling and drilling methodologies, a summary of soil and groundwater laboratory results, discussion of findings, and

conclusions regarding the fate/transport and delineation/separation of the groundwater contaminant plumes from the market and BLW sites.

FIELD METHODS AND LABORATORY ANALYSIS

Temporary Boring Installation, Sampling, and Closure

Borings B11 through B14 were installed using direct push technology. Continuous cores were collected using macrocore rods with an outside diameter (OD) of 2.125 inches, fitted with plastic sample liners to facilitate the collection of soil samples. Soil samples were collected at approximate 4-foot intervals and at zones of obvious contamination. Soil samples were collected from the plastic liners of the macrocore sampling apparatus and placed directly into brass tubes, sealed with Teflon, and capped. The soil lithology was analyzed and logged in general accordance with ASTM-2488. Grab groundwater samples were collected using a screen point sampler with dedicated disposable PVC tubing, equipped with a check valve, and were decanted directly into laboratory-supplied containers (40-milliliter glass vials). Grab groundwater was generally collected from the 12 to 16 feet below ground surface (bgs) sampling interval within the open borehole. The locations of current and historic borings are presented in Figure 2. Boring logs from the current investigation are included in Attachment 1. Copies of the current laboratory analytical results are included as Attachment 2.

The borings were closed with bentonite to approximately 0.5 feet bgs, and cold-patch asphalt to grade. Rinse water was containerized and stored on-site in steel, 55-gallon, DOT-approved drums pending characterization and disposal. All drilling and sampling equipment was decontaminated before and after each use with Alconox and a pressure washer.

Monitoring Well Installation

On September 14, 2005, LACO installed two monitoring wells (MW4 and MW5), both with screen intervals of 10 to 15 feet bgs. Monitoring wells were installed using a direct push drill rig fitted with dual tube 3.25-inch OD rods. Prior to the installation of monitoring wells MW4 and MW5 using dual tube rods, continuous cores were collected to 15 feet bgs using macrocore rods with an OD of 2.125 inches, fitted with plastic sample liners to facilitate the collection of soil samples.

The wells were constructed with 1.5-inch diameter Schedule 40 PVC pipe with 0.010-inch slotted pipe over the screened intervals mentioned above, and blank pipe from the top of the screened interval to the ground surface. The annular space was filled with No. 2/16 sand from the total depth to 1 foot above the screened interval. Cement slurry was placed from the sand pack to 1.5 feet bgs. The wells were then completed with locking well caps and flush-mount access boxes with a locking, watertight lid, set in an apron of traffic-rated concrete extending at least 6 inches from the access box. Monitoring well logs are included in Attachment 1.

Soil samples were collected from monitoring well MW4 at 8, 12, 14, and 16 feet bgs, and from monitoring well MW5 at 4, 8, 12, and 16 feet bgs. Samples were collected directly from continuous core liners into laboratory-supplied brass tubes, sealed with Teflon, and capped. The soil lithology was analyzed and logged in general accordance with ASTM-2488. Copies of the current laboratory analytical results are included as Attachment 2.

Monitoring wells MW4 and MW5 were developed on September 26, 2005. Please see Attachment 3 for monitoring well development records. Groundwater samples will be collected from all monitoring wells during the next quarterly sampling event, tentatively scheduled for December 2005.

Laboratory Analysis

The soil and groundwater samples were placed in a cold cooler to ensure the preservation of the analytes, and transported under standard chain-of-custody protocols to North Coast Laboratories in Arcata, California.

Soil samples were submitted for analysis of:

- Total petroleum hydrocarbons as gasoline (TPHg) by EPA Method 5035/GCFID(LUFT)/EPA 8015B
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method EPA 5035/EPA 8021B
- Methyl tertiary butyl ether (MTBE) by EPA Method EPA 5035/EPA 8021B

Groundwater samples were submitted for analysis of:

- TPHg by EPA Method 8260 List 1
- BTEX by EPA Method 8260 List 1
- MTBE by EPA Method 8260 List

RESULTS OF INVESTIGATION

Soil Laboratory Analytical Results

The highest concentrations of TPHg detected in soil for the current investigation were in boring B13, located adjacent to the former pump island dispenser (Table 1). TPHg was reported at the 8, 10, 12, 13.5, and 16 feet bgs sampling intervals at concentrations of 940 µg/g, 150 µg/g, 1,300 µg/g, 3,000 µg/g, and 1.5 µg/g, respectively. It appears that the core of the soil plume noted in this boring is located from approximately 12 to 13.5 feet bgs, with an order of magnitude reduction noted above from 8 to 12 feet bgs, and two orders of magnitude reduction below at 16 feet bgs. The smear zone appears to extend from approximately 8 to 16 feet bgs. However, no soil samples were collected between 1.6 and 8 feet bgs, so contamination in soil may be shallower than 8 feet bgs.

Boring B11 was located approximately 95 feet south of the former UST in the parking lot of the historic Schull building. Boring B12 was located approximately 75 feet southwest of the former UST along the southern side of South Railroad Avenue. Boring B14 was located approximately 60 feet southeast of the former UST, behind the market structure, near the old railroad grade located south and adjacent to the site. Lesser concentrations of TPHg were noted in boring B11 at 11.5 and 15.5 feet bgs (1.8 µg/g and 6.4 µg/g, respectively); and, in boring B14 at 8, 10, and 14 feet bgs (2.5 µg/g, 5.1 µg/g, and 3.7 µg/g, respectively). No analytes were reported at all sampling intervals for boring B12. All samples exhibited a significant lack of BTEX concentrations, indicating a degraded secondary source. No MTBE was detected in any of the soil samples. In the case narrative, the laboratory noted that the reported TPHg concentrations in soil and groundwater do not present the peak pattern consistent with a fresh gasoline standard, and that the reported results represent the amount of material in the gasoline range. These comments are typical at sites that exhibit degraded or weathered petroleum characteristics. Figure 3 presents soil analytical results from the current

investigation.

Figure 4 presents a current and historic TPHg soil isoconcentration map using soil analytical data from the BLW site concurrently with the market site (Tables 1 and 2). In Figure 4, 1,000 µg/g and 100 µg/g isoconcentration contours are illustrated for the market and the BLW sites. Lesser isoconcentration contours are not illustrated. For the market site, two areas exhibiting concentrations in soil greater than 1000 µg/g are presented. One area (MW2 and B13) is located adjacent to the former pump island and dispenser, and the other area (B5) is located immediately down-gradient of the former UST cavity. The 100 µg/g isoconcentration contour extends approximately 60 feet south from the location of the former pump island and dispenser. For the BLW site, the 1000 µg/g isoconcentration contour encircles the location of the former pump island and one of the former USTs (750-gallon). The 100 µg/g isoconcentration contour extends from the BLW site to the market site structure, based on the detected concentrations reported for samples collected during the installation of monitoring well MW3; and, its final limits are unknown as shown by the dashed contour line and question marks. Based on the information provided in Figure 4, it appears that the TPHg soil plume presumed to originate from the market site is limited in extent as concentrations substantially decreased in borings (B2-01, MW5, and B7) located further downgradient. Additionally, soil contamination reported from former boring B2 and monitoring well MW2 is located up-gradient from the former pump island at the market site. It is likely that this soil contamination originated from the BLW site. Additional borings located up-gradient of monitoring well MW2, between monitoring wells MW2 and MW3, will provide additional information regarding the impact to soil at the market site from the up-gradient BLW site.

It is unclear whether soil contamination detected in borings installed into the old railroad grade (B7, B14, B3-01, B4-01) originated from the market site or the BLW site. These borings that exhibited detections in soil are located further from the former primary sources at each site. However, as the surface topography slopes significantly to the south, and contamination in groundwater can migrate and become sorbed to soil down gradient of a site, it is possible that a 10 µg/g isoconcentration

contour could be illustrated from the former primary sources located at the BLW site to the locations of B3-01 (94 µg/g) and B4-01 (62 µg/g).

Groundwater Laboratory Analytical Results

Groundwater analytical results in borings for the current investigation are presented in Figure 5. Figure 6 presents a current and historic TPHg groundwater isoconcentration map using groundwater analytical data from the BLW site concurrently with the market site (Tables 3 and 4). The highest concentration of TPHg in groundwater for the current investigation was reported from boring B13, located adjacent to the former pump island at the market site. TPHg and BTEX were reported at concentrations of 280,000 µg/L, 25 µg/L, 60 µg/L, 3,900 µg/L, and 15,300 µg/L, respectively. The elevated concentration of TPHg is indicative of degraded free product. A petroleum hydrocarbon sheen and strong petroleum odors were observed during the collection of groundwater samples from boring B13. Concentrations of TPHg in borings B11 and B14 exhibited two orders of magnitude reduction. Concentrations of BTEX were generally one order of magnitude higher in boring B14 than in B11. Additionally, the concentration of benzene in boring B14 was the highest reported for the current investigation. No MTBE was detected in any of the groundwater samples.

DISCUSSION

Figure 6 presents TPHg isoconcentration contours in groundwater for borings, and illustrates the approximate location of the plume originating from the market site. LACO did not contour the monitoring well analytical results concurrently with boring results because the longer screen intervals in the monitoring wells may exhibit diluted results as compared with the results of the borings. Additionally, the approximate limits of the plume originating from the BLW site are also presented on Figure 6. Please note that the eastern and southern margins of the market site plume and the western and southern margins of the BLW site plume are purposely vague, as noted by the dashed lines and question marks within the isoconcentration contours. It is likely that during periods of the greatest hydraulic head (winter), the gradient direction fluctuates. As the local hydraulic head decreases during the summer months, the range of gradient directions likely decreases. It appears that

as the hydraulic gradient fluctuates toward the southwest, contamination from the BLW site impacts the market site.

For the market site, please note that the 100,000 µg/L TPHg isoconcentration contour includes boring B13 and boring B5. However, no groundwater samples were collected from borings B1 through B5. An estimation of what concentrations are expected in groundwater (µg/L) can be made from existing soil (µg/g) data. This estimate is made by taking the concentration of the soil data, dividing by porosity, and multiplying by 1000 to convert to µg/L. As noted in Table 1, the analytical result of boring B5 for TPHg was 1,400 µg/L. Using a porosity of 0.4 (silt), the calculated groundwater concentration is 3,500,000 µg/L. Accounting for one (conservative) order of magnitude degradation to account for the time elapsed between the last possible release date and the present, the expected result in groundwater would be reduced to 350,000 µg/L. Doing the same for the soil data reported for boring B2 and B3 puts these locations within the 10,000 µg/L isoconcentration contour, and for boring B4, within the 1,000 µg/L contour. As boring B1 is located up-gradient of the primary release sources at the market site, LACO attributes the soil (and potential groundwater) contamination detected in this boring to the BLW site.

Figure 7 presents an historic and current benzene groundwater isoconcentration map for the market and BLW sites. As noted in Figure 7, the highest concentrations of benzene in groundwater were detected at the BLW site. The 1,000 µg/L isoconcentration contour encircles the former pump island and two of the former USTs (1000-gallon and 750-gallon). The eastern perimeter of the 100 µg/L contour extends from the BLW site to the borings located within the old railroad grade. It is also possible that the benzene detections reported for borings B6 and B2-01 originated from the BLW site. Please note that only a detection of 25 µg/L of benzene was reported for boring B13, located at the primary source at the market site. LACO asserts that it is unlikely that the benzene reported for borings B7, B14, B1-01, B3-01, and B4-01 originated from the market site, with such elevated concentrations of benzene noted up gradient at the BLW site. This assumption is further supported by the information provided in Figures 8 and 9. As noted in Figure 8, the highest detections of TPHg, benzene, and toluene detected at both sites during the September 1, 2005, sampling event were

reported for monitoring wells MW103, MW104, and MW3. The highest concentration of ethylbenzene and xylenes were reported for monitoring well MW104. Figure 9 presents a TPHg isoconcentration map in groundwater for the monitoring wells.

Fate and Transport

Laboratory data collected from points located east/southeast of the market and BLW sites have been consistently reported as non-detect (ND) in groundwater (MW-102, MW-106, WP-8, WP-10, and B8). Monitoring wells MW102 and MW106 have been reported as ND since sampling was initiated in March 2001. Points located to the extreme southwest (WP-14, B5-01, and B12) were also reported as ND. However, data points (B1-01, B10, B11, B14, B3-01, B4-01, and WP-16) located due south of each site's USTs exhibit analyte detections. Thus, analytical results for borings located within the old railroad grade, and potentially the results for borings located in South Railroad Avenue, may represent detections from its respective up-gradient source, or may represent co-mingled detections. At the very least, as the hydraulic gradient fluctuates to the southwest, co-mingled, compounded results are reported. Alternatively, these reported concentrations represent detections solely from the BLW site.

Trying to interpret the separation of the two plumes is difficult. A finger-print analysis (piano key analysis) of the two fuel types is not prudent because of the ages of the fuel and release dates. The market site had potentially two release sources separated by approximately 20 feet (pump island dispenser and 550-gallon UST). However, the BLW site pump island dispenser and two of the three USTs (1000-gallon and 750-gallon) are basically at the same location. The 650-gallon UST at the BLW site was reportedly determined to be leak free and this is supported by the ND analytical results at points in the immediate vicinity.

The analytical results of the cluster of borings WP-15, B3-01, and B14, located within the old railroad grade are interesting. WP-15, installed in 1998 exhibited ND results for TPHg. However, borings B3-01, installed in 2001, and B14 installed in 2005, exhibited results of 17,000 µg/L and 3,300 µg/L, respectively. One possible explanation is that, in 1998 the contaminant plume

originating from the BLW site had not impacted the location of WP-15. Within 3 years (2001), it is possible that the plume had migrated south to the location of B3-01. The plume had been previously located (in 1998) at WP-9 at a concentration of 13,000 µg/L (same order of magnitude and similar concentration as 17,000 µg/L reported for boring B3-01). Within 2 more years (2005), the plume may have degraded by one order of magnitude and/or may have migrated further (B14 – 3,300 µg/L). LACO finds it unlikely that the 17,000 µg/L detection noted in boring B3-01 originated from the market site due to the concentration of TPHg reported for boring WP-9, and the data points separating this location from the market site that exhibit an order of magnitude reduction in concentration.

Based on the distribution of the contaminants across the site, the predominant hydraulic gradient in the local area appears to be toward the south-southwest, with potentially only a limited component of flow to the southeast, and/or from diffusion and dispersion of the contaminants at the plume margin(s). Topography in the local area generally slopes to the south, with a steeper slope to the southwest noted at the western portion of the market site.

Based on these observations, it appears that a strong southeasterly gradient is not present at the site. As reported in LACO's *Groundwater Monitoring Report; Third Quarter 2005*, the hydraulic gradient was reported at S15°E with a slope of 1 percent. However, when performing a three-point calculation using the hydraulic head data from the same day of monitoring wells MW102, MW-104, and MW106, the resultant hydraulic gradient is S4°E at 0.9 percent (Figure 10). This southerly gradient may be controlled by the most southern extent of Powers Creek, which is the lowest topographic point in the local area. Powers Creek takes a southwesterly turn underneath the historic Schull building and passes underneath South Railroad Avenue (SRA). After the creek passes under SRA, it crosses the 80-foot contour interval and continues to lower elevations. Groundwater in the area of the two sites likely mimics surface topography. Attachment 4 includes three figures from SHN reports dated March and May 2003: a site map with cross-section baselines A-A' and B-B', cross-section A-A', and cross-section B-B'. Based on the information illustrated in cross-section B-B', fill material is evident at the location of monitoring well MW103 and WP7 that progressively

thickens in an easterly trend toward Powers Creek. It appears that the original water course for Powers Creek was located approximately 65 feet west of its present location in regards to Railroad Avenue. No soil samples were collected from borings B8, B9, and B10, so no fill information is available at these locations. The log for boring B11 does not indicate any fill material to be present. The topography of the portion of Powers Creek located southeast and adjacent of both sites is higher in elevation than the southwesterly leg, which may explain the non-detection of analytes along this portion of Powers Creek. Hydraulic data collected from newly installed monitoring wells MW4 and MW5 should provide more information in regards to these assumptions (information will be provided in LACO's *Groundwater Monitoring Report; Fourth Quarter 2005*, to be submitted in December 2005 or January 2006).

CONCLUSIONS

- It appears that the petroleum hydrocarbon plume originating from the BLW site is compounding the concentrations of contaminants at the market site during seasonal gradient direction fluctuations to the southwest.
- Based on the distribution of contaminants originating from both sites, it appears that a strong hydraulic gradient direction to the southeast is not present at the site.
- It appears that the groundwater flow is largely toward the south-southwestern extent of Powers Creek.

RECOMMENDATIONS

- The submittal of a brief letter workplan outlining the installation of four temporary borings in Railroad Avenue to determine the mass flux of contaminants in soil and groundwater migrating onto the market site from the BLW site that are compounding contaminant concentrations at the market site. The borings will be installed up gradient of monitoring well MW2 and between monitoring wells MW2 and MW3. Submit a brief letter report of findings for the boring installation.
- The submittal of a limited site conceptual model including updated cross-sections to support the assumptions discussed in the *Fate and Transport* section of this report.

- The submittal of a limited CAP/feasibility study that addresses three remedial alternatives, feasibility, costs, and the selected alternative. After the CAP is approved by the HCDEH, submit a RAP addendum to the previously submitted RAP dated November 18, 2004. Modify the mass calculations in the RAP Addendum as appropriate.
- After the RAP Addendum is approved by the HCDEH, implement the selected remedial alternative, if appropriate.

LIMITATIONS

LACO has exercised a standard of care equal to that generated for this industry in our area to ensure that the information contained in this report is current and accurate. LACO disclaims any and all liability for any errors, omissions, or inaccuracies in the information and data presented in this report and/or any consequences arising therefrom, whether attributable to inadvertency or otherwise. LACO makes no representations or warranties of any kind including, but not limited to, any implied warranties with respect to the accuracy or interpretations of the data furnished. LACO assumes no responsibility of any third party reliance on the data presented, and that data generated for this report represents information gathered at that time and at the indicated locations. It should not be utilized by any third party to represent data for any other time or location. It is known that site and subsurface environmental conditions can change with time and under anthropologic influences. This report is valid solely for the purpose, site, and project described in this document. Any alteration, unauthorized distribution, or deviation from this description will invalidate this report.

LIST OF FIGURES, TABLES, AND ATTACHMENTS

Figure 1 Location Map

Figure 2 Site Map with Boring and Monitoring Well Locations

Figure 3 Soil Analytical Results – Current Investigation

Figure 4 Current and Historic TPHg in Soil Isoconcentration Map

Figure 5 Groundwater Analytical Results (Borings) – Current Investigation

Figure 6 Current and Historic TPHg in Groundwater Isoconcentration Map

Figure 7 Current and Historic Benzene Groundwater Isoconcentration Map

Figure 8	Monitoring Well Analyte Concentrations Map (9/01/05)
Figure 9	TPHg Isoconcentration Map in Groundwater for Monitoring Wells
Figure 10	Revised Hydraulic Gradient Map (9/01/05)

Table 1	Current and Historic Soil Laboratory Analytical Results for Soil
Table 2	Historic Soil Analytical Results – Borings; Blue Lake Belting and Leather Works
Table 3	Current and Historic Laboratory Analytical Results for Groundwater - Borings
Table 4	Historical Groundwater Analytical Results – Borings; Blue Lake Belting and Leather Works

Attachment 1	Boring and Monitoring Well Installation Logs – Current Investigation
Attachment 2	Laboratory Analytical Reports
Attachment 3	Monitoring Wells MW4 and MW5 Development Records
Attachment 4	Three Figures from SHN Reports Dated March and May 2003

TDN:jg

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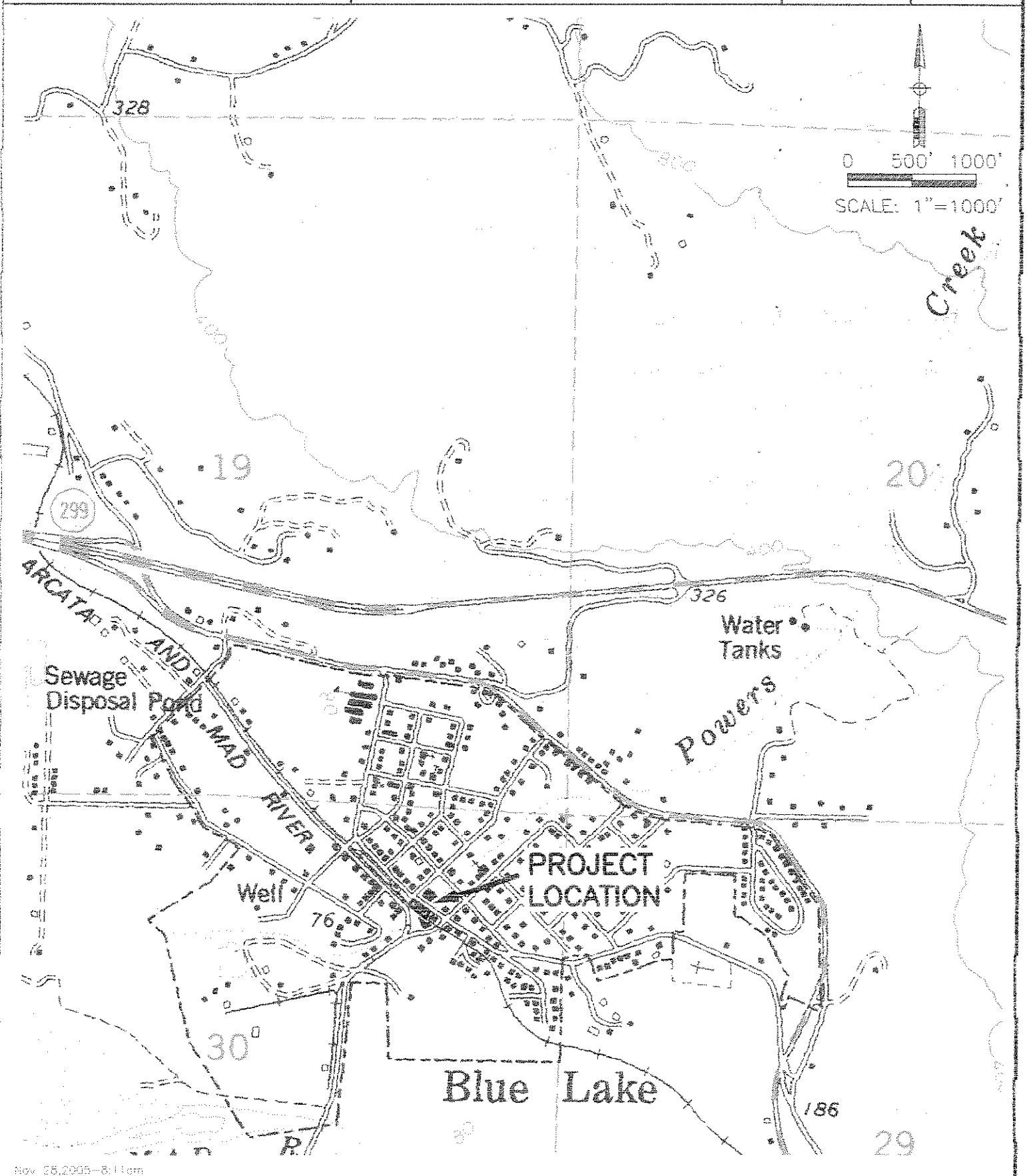
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

PROJECT	REPORT OF FINDINGS, BORING INSTALLATION	BY RJM	FIGURE 1
CLIENT	PAT FOLKINS	DATE 11/17/05	
LOCATION	BLUE LAKE MARKET	CHECK TJN	JOB NO. 3888.02
	LOCATION MAP	SCALE 1"=1000'	



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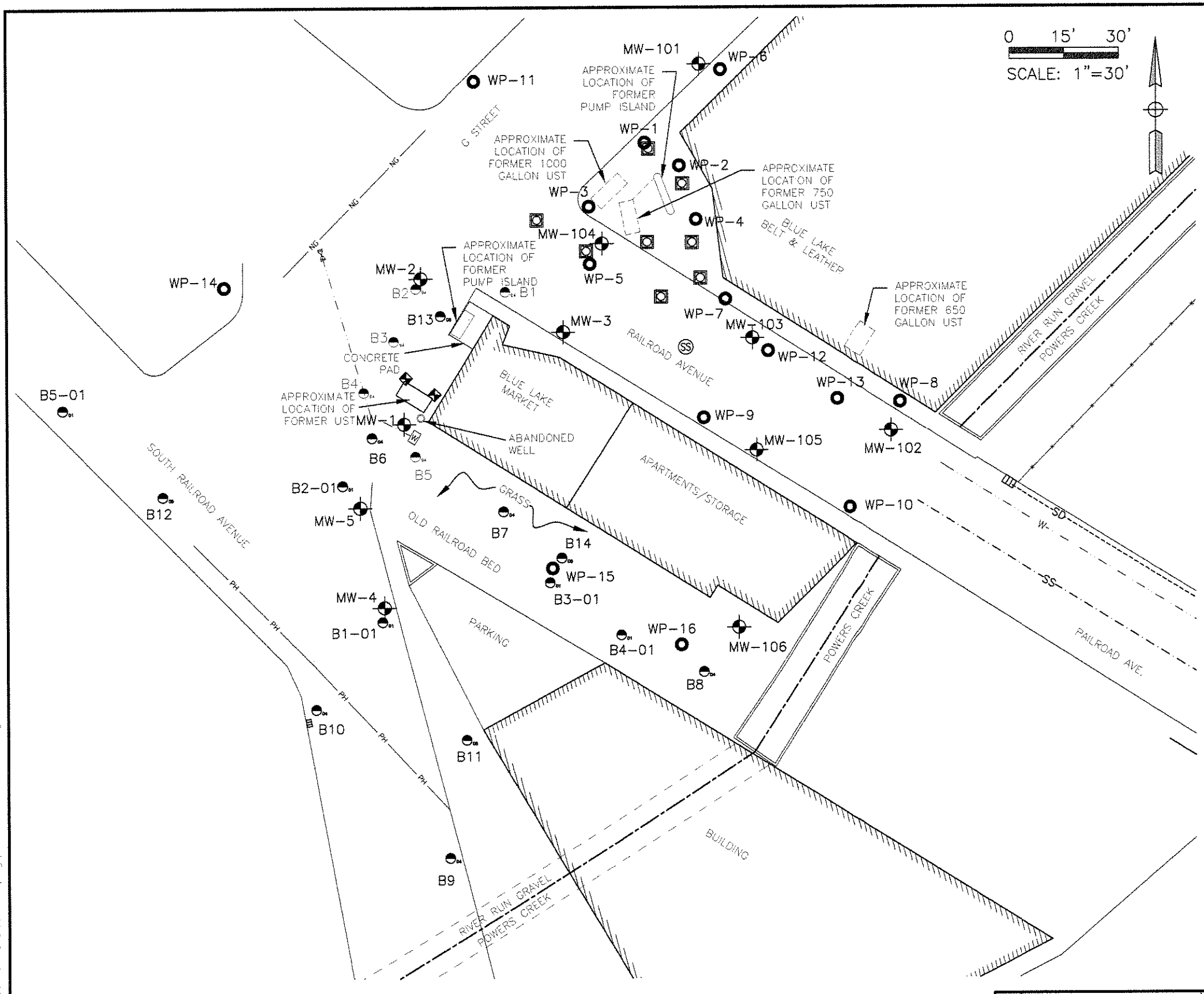

LEGEND

- MW-1 — LACO MONITORING WELL
- SHN MONITORING WELL
- MW-106
- WELL POINT (SHN 1998)
- BORING (LACO 1994)
- BORING (LACO 2001)
- BORING (LACO 2004)
- BORING (LACO 2005)
- SOIL SAMPLE LOCATIONS
- SHN OZONE SPARGE WELL
- POWERS CREEK INTERMITTENT FLOW

SITE SURVEY PERFOMED ON 10/11/05

NOTE: DISTANCES ARE APPROXIMATE

NO.	REVISION	BY	CHK	DATE

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

REPORT OF FINDINGS/ BORING INSTALLATION
SITE MAP w/BORING & MONITORING WELL LOCATIONS

PAT FOLKINS
BLUE LAKE MARKET
RAILROAD AVE, BLUE LAKE, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	TDN
APPVD	
DATE	11/09/05
JOB NO.	3888.02
FIGURE	2

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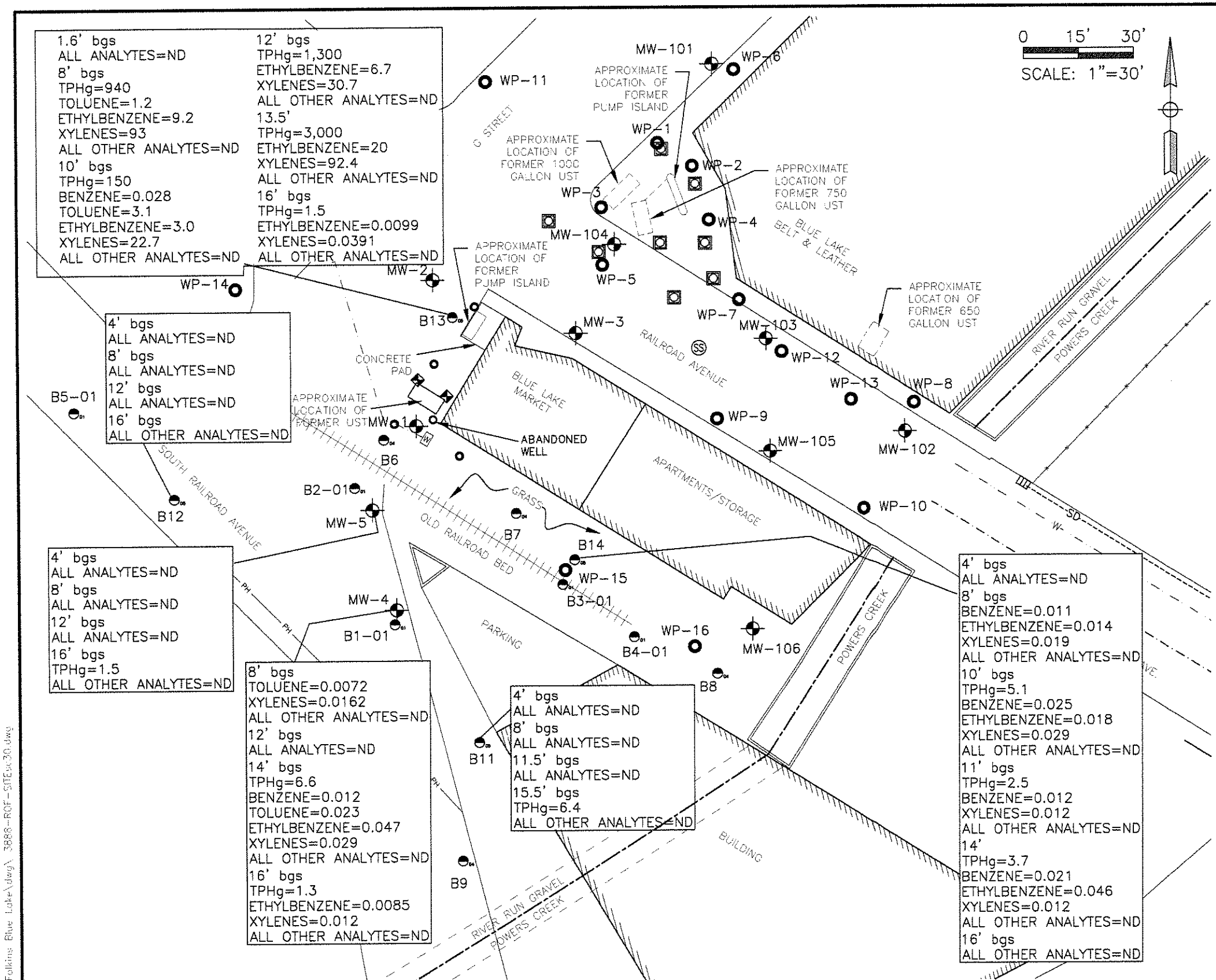

NO.	REVISION	BY	CHK	DATE

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

REPORT OF FINDINGS/ BORING INSTALLATION
SOIL ANALYTICAL – CURRENT INVESTIGATION

PAT FOLKINS
BLUE LAKE MARKET
RAILROAD AVE, BLUE LAKE, CA

SCALE	1"=30'
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CHECK	TDN
APPVD	
DATE	11/18/05
JOB NO.	3888.02
FIGURE	3

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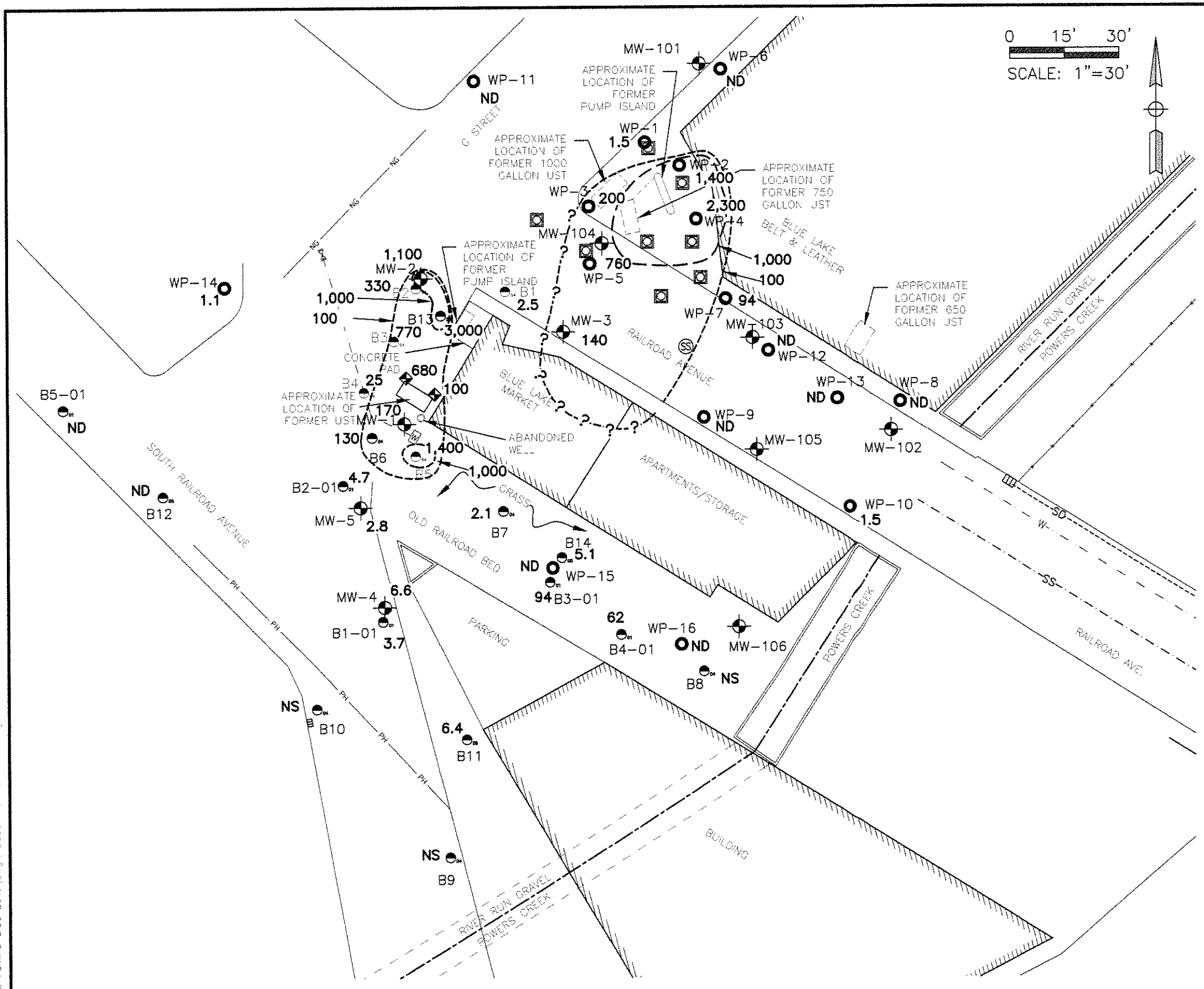

LEGEND

- MW-1 — LACO MONITORING WELL
- MW-106 — SHN MONITORING WELL
- WELL POINT (SHN 1998)
- BORING (LACO 1994)
- BORING (LACO 2001)
- BORING (LACO 2004)
- BORING (LACO 2005)
- SOIL SAMPLE LOCATIONS
- SHN OZONE SPARGE WELL
- 100 — TPHg ISOCONCENTRATION LINES

ALL RESULTS SHOWN ARE IN MICROGRAMS PER GRAM (µg/g)

THE RESULTS PRESENTED IN THIS FIGURE REPRESENT THE HIGHEST CONCENTRATIONS REPORTED FOR EACH BORING.

ND = NON-DETECT

NS = NOT SAMPLED

NOTE: DISTANCES ARE APPROXIMATE

NO.	REVISION	BY	CHK	DATE

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

REPORT OF FINDINGS/ BORING INSTALLATION
CURRENT & HISTORIC TPHg IN SOIL ISOCONCENTRATION MAP

PAT FOLKINS
BLUE LAKE MARKET
RAILROAD AVE, BLUE LAKE, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	TDN
APPVD	
DATE	11/18/05
JOB NO.	3888.02
FIGURE	4

Nov 28,2005-8:24am
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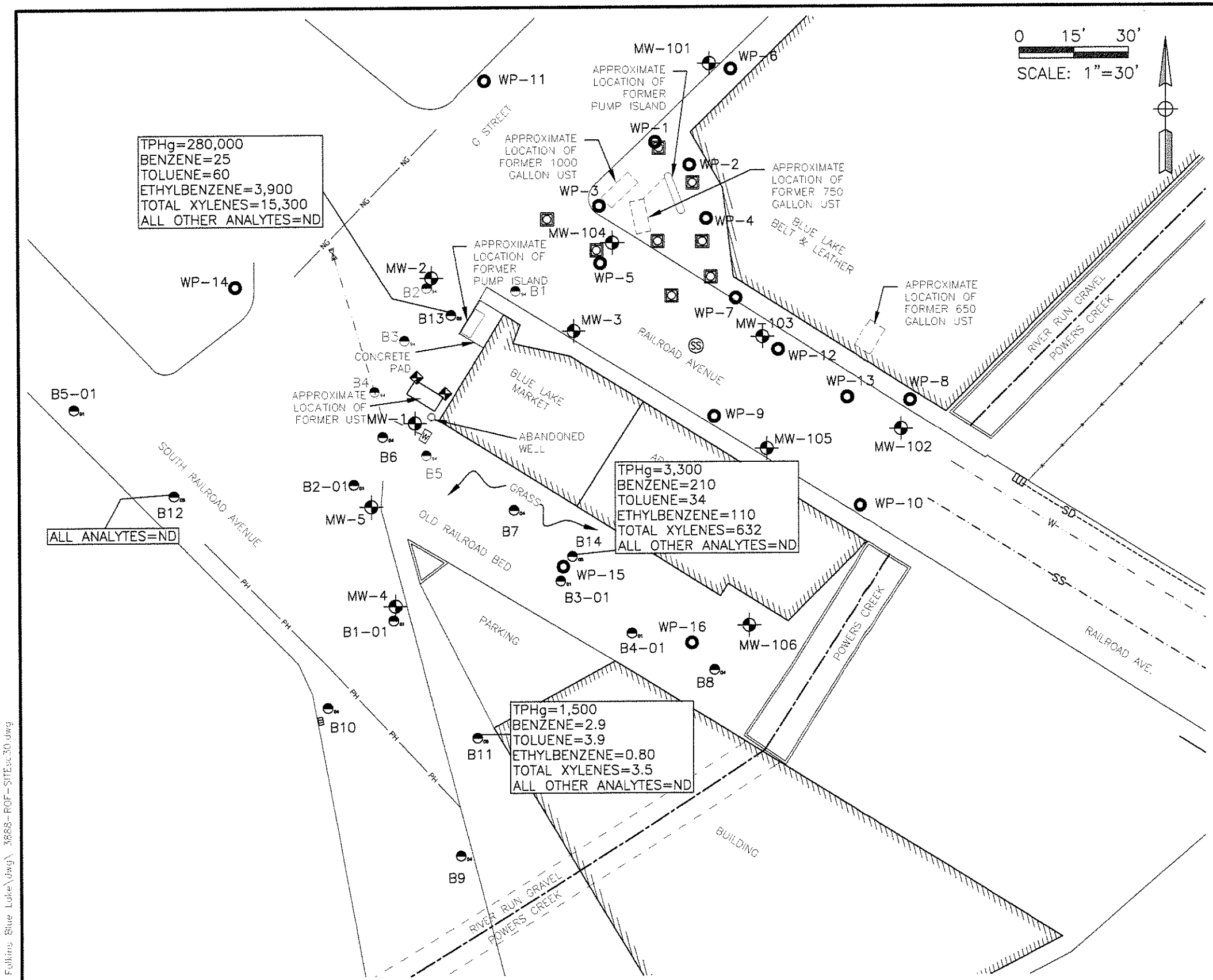

LEGEND

- MW-1 — LACO MONITORING WELL
- MW-106 — SHN MONITORING WELL
- WELL POINT (SHN 1998)
- BORING (LACO 1994)
- BORING (LACO 2001)
- BORING (LACO 2004)
- BORING (LACO 2005)
- SOIL SAMPLE LOCATIONS
- SHN OZONE SPARGE WELL

ALL RESULTS REPORTED IN MICROGRAMS PER LITER (µg/L)

ND = BELOW DETECTION LIMITS

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REPORT OF FINDINGS/ BORING INSTALLATION
GROUNDWATER ANALYTICAL RESULTS BORINGS
CURRENT INVESTIGATION

PAT FOLKINS
BLUE LAKE MARKET
RAILROAD AVE, BLUE LAKE, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	TDN
APPVD	
DATE	11/18/05
JOB NO.	3888.02
FIGURE	5

Nov 28,2005-8:25am
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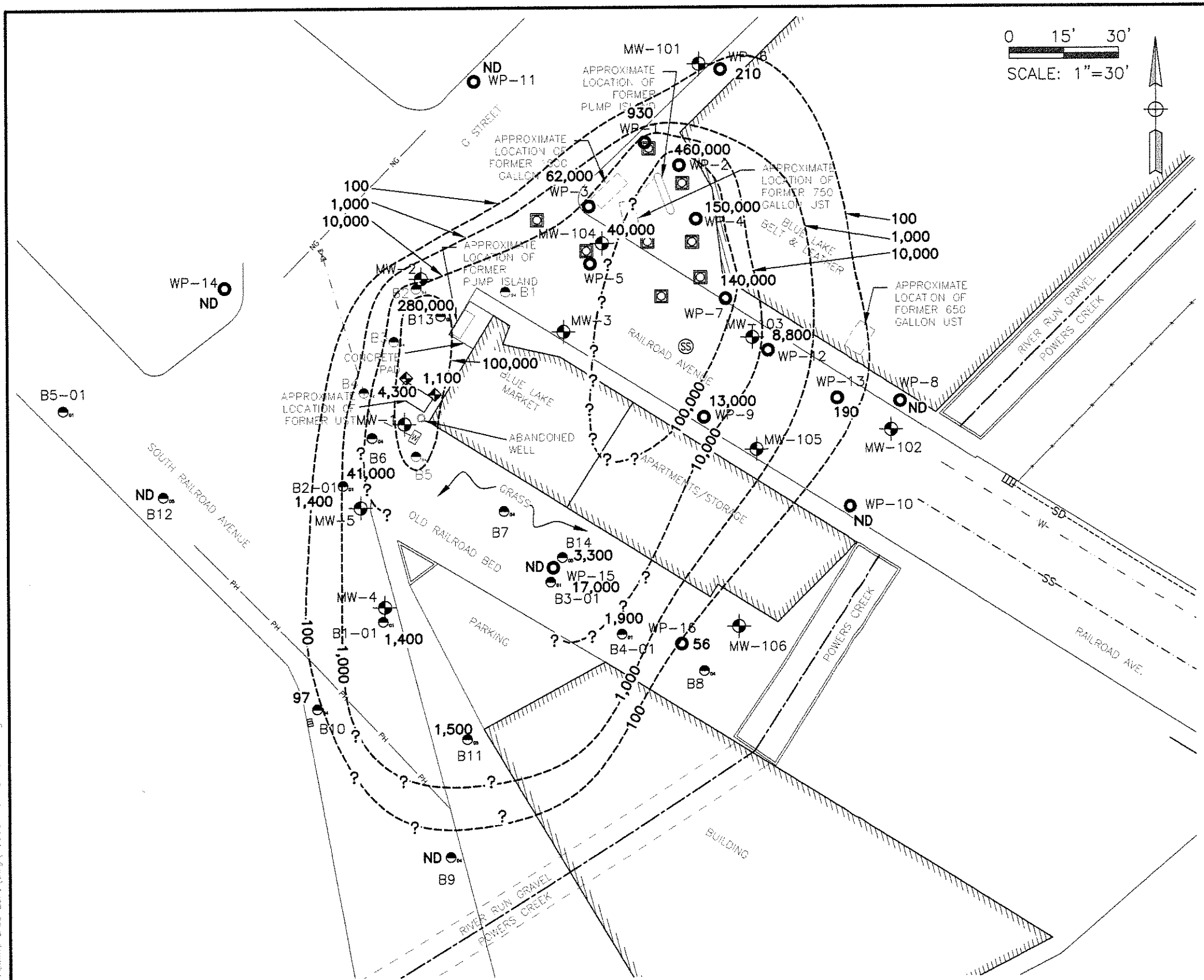

LEGEND

- MW-1 — LACO MONITORING WELL
- MW-106 — SHN MONITORING WELL
- WELL POINT (SHN 1998)
- BORING (LACO 1994)
- BORING (LACO 2001)
- BORING (LACO 2004)
- BORING (LACO 2005)
- SOIL SAMPLE LOCATIONS
- SHN OZONE SPARGE WELL
- 100 — INFERRED TPHg ISOCONCENTRATION CONTOURS

ALL RESULTS SHOWN ARE IN MICROGRAMS PER LITER (µg/L)

MONITORING WELL ANALYTICAL RESULTS WERE NOT CONSIDERED IN REGARDS TO THE LOCATION OF THE ISOCONCENTRATION CONTOURS.

ND = NON-DETECT

NS = NOT SAMPLED

UST LOCATIONS ARE APPROXIMATE

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REPORT OF FINDINGS/ BORING INSTALLATION
CURRENT & HISTORIC TPHg IN GROUNDWATER ISOCONCENTRATION MAP

PAT FOLKINS
BLUE LAKE MARKET
RAILROAD AVE, BLUE LAKE, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	TDN
APPVD	
DATE	11/18/05
JOB NO.	3888.02
FIGURE	6

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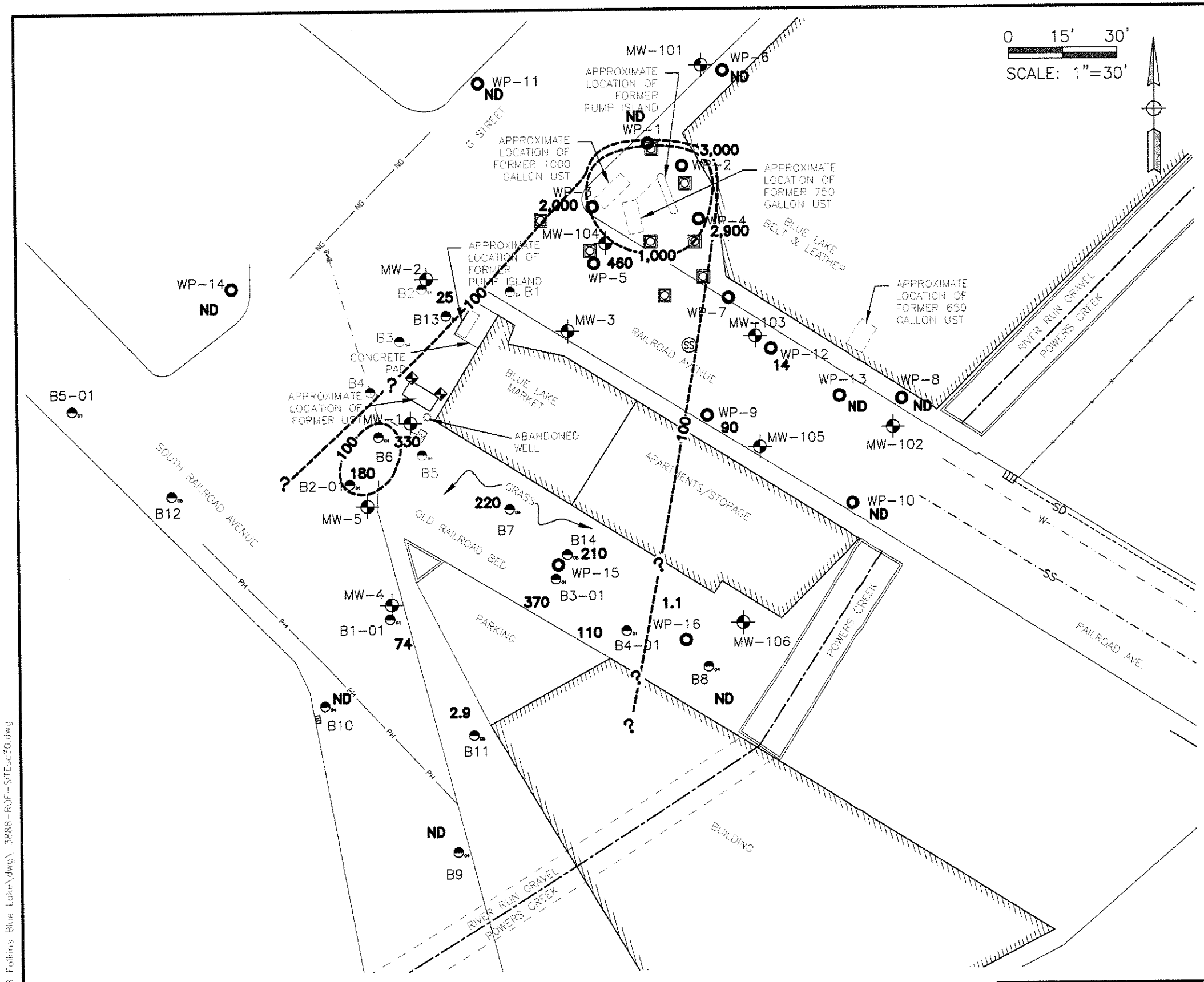

LEGEND

- MW-1 — LACO MONITORING WELL
- MW-106 — SHN MONITORING WELL
- WELL POINT (SHN 1998)
- BORING (LACO 1994)
- BORING (LACO 2001)
- BORING (LACO 2004)
- BORING (LACO 2005)
- SOIL SAMPLE LOCATIONS
- SHN OZONE SPARGE WELL
- 100 — INFERRED BENZENE ISOCONCENTRATION CONTOURS

ALL RESULTS SHOWN ARE IN MICROGRAMS PER LITER (µg/L)

MONITORING WELL ANALYTICAL RESULTS WERE NOT CONSIDERED IN REGARDS TO THE LOCATION OF THE ISOCONCENTRATION CONTOURS.

ND = NON-DETECT

UST LOCATIONS ARE APPROXIMATE

NO.	REVISION	BY	CHK	DATE

LACO ASSOCIATES
CONSULTING ENGINEERS
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REPORT OF FINDINGS/ BORING INSTALLATION
CURRENT & HISTORIC BENZENE GROUNDWATER ISOCONCENTRATION MAP

PAT FOLKINS
BLUE LAKE MARKET
RAILROAD AVE, BLUE LAKE, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	TDN
APPVD	
DATE	11/17/05
JOB NO.	3888.02
FIGURE	7

Nov 28,2005-8:28am
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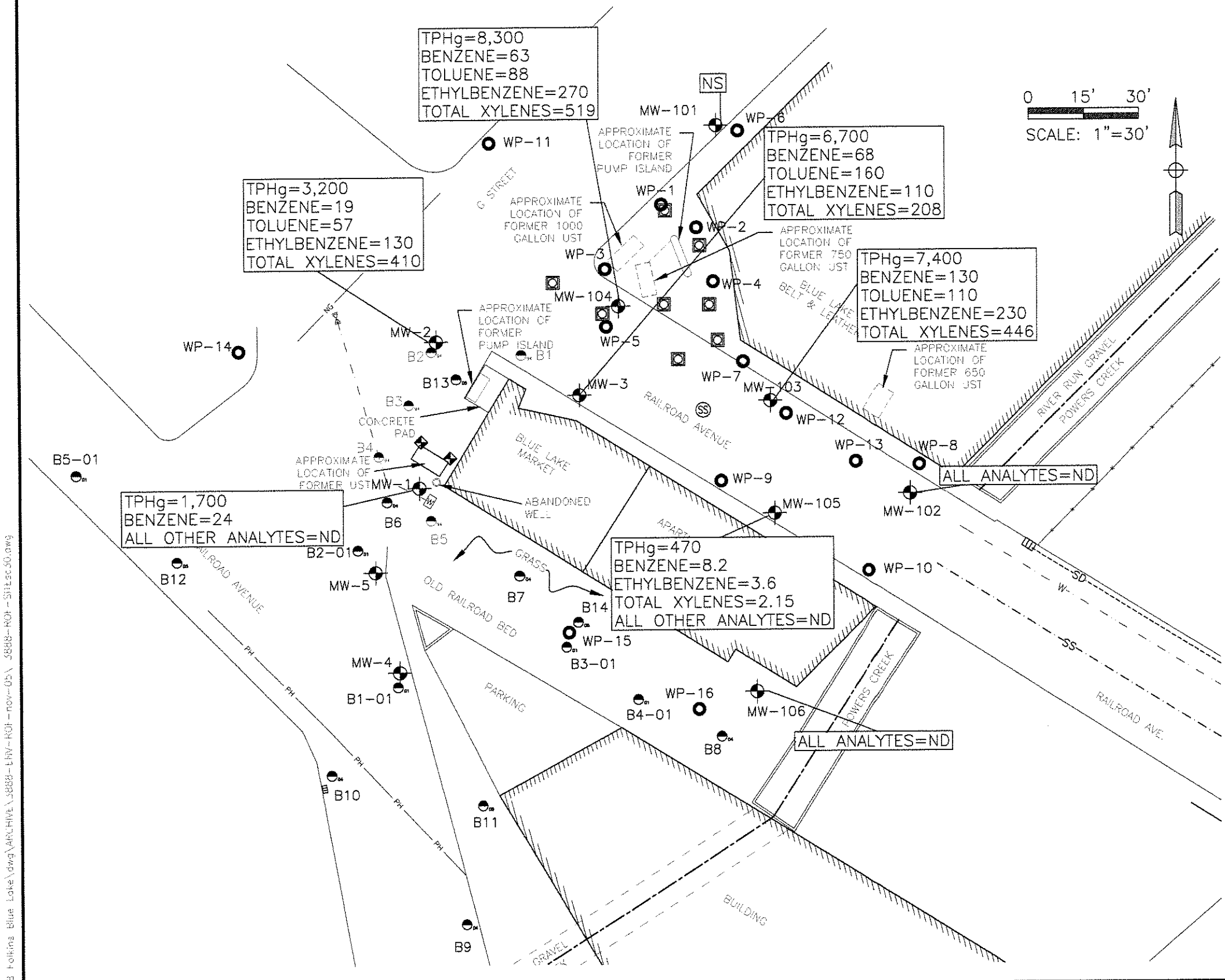

LEGEND

MW-1	LACO MONITORING WELL
MW-106	SHN MONITORING WELL
	WELL POINT (SHN 1998)
	BORING (LACO 1994)
	BORING (LACO 2001)
	BORING (LACO 2004)
	BORING (LACO 2005)
	SOIL SAMPLE LOCATIONS
	SHN OZONE SPARGE WELL
ND	BELOW DETECTION LIMITS
NS	NOT SAMPLED

ALL RESULTS REPORTED IN MICROGRAMS PER LITER ($\mu g/L$)

NO.	REVISION	BY	CHK	DATE

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REPORT OF FINDINGS/ BORING INSTALLATION

MONITORING WELL ANALYTE CONCENTRATION MAP (9/01/05)

PAT FOLKINS
BLUE LAKE MARKET
RAILROAD AVE, BLUE LAKE, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	TDN
APPVD	
DATE	11/18/05
JOB NO.	3888.02
FIGURE	8

Nov 28,2005--12:25pm
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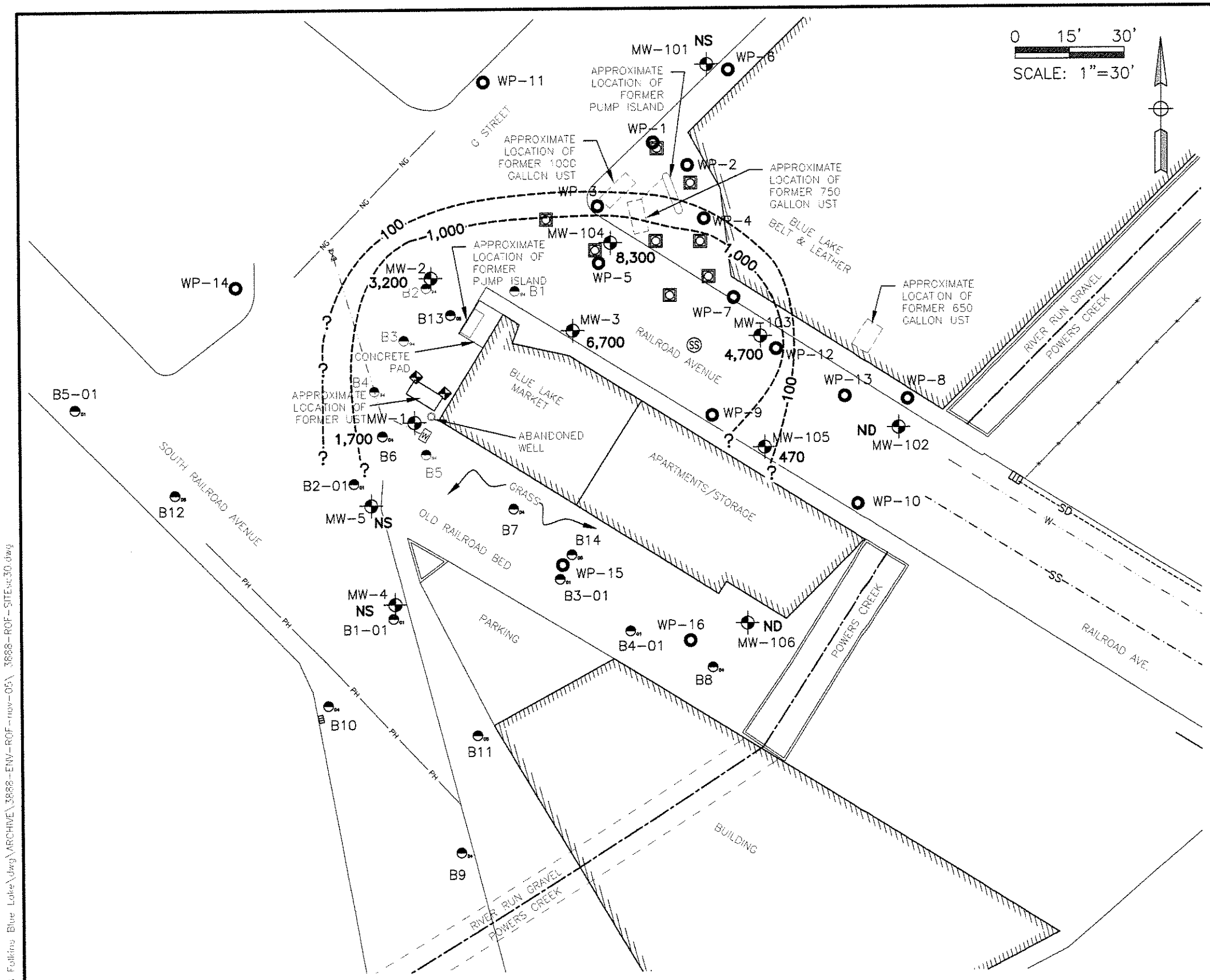


LEGEND

- MW-1 — LACO MONITORING WELL
- MW-106 — SHN MONITORING WELL
- WELL POINT (SHN 1998)
- BORING (LACO 1994)
- BORING (LACO 2001)
- BORING (LACO 2004)
- BORING (LACO 2005)
- SOIL SAMPLE LOCATIONS
- SHN OZONE SPARGE WELL
- 100 — INFERRED TPHg ISOCONCENTRATION CONTOURS

ALL RESULTS SHOWN ARE IN MICROGRAMS PER LITER (µg/L)

ND = NON-DETECT

UST LOCATIONS ARE APPROXIMATE

NO.	REVISION	BY	CHK	DATE

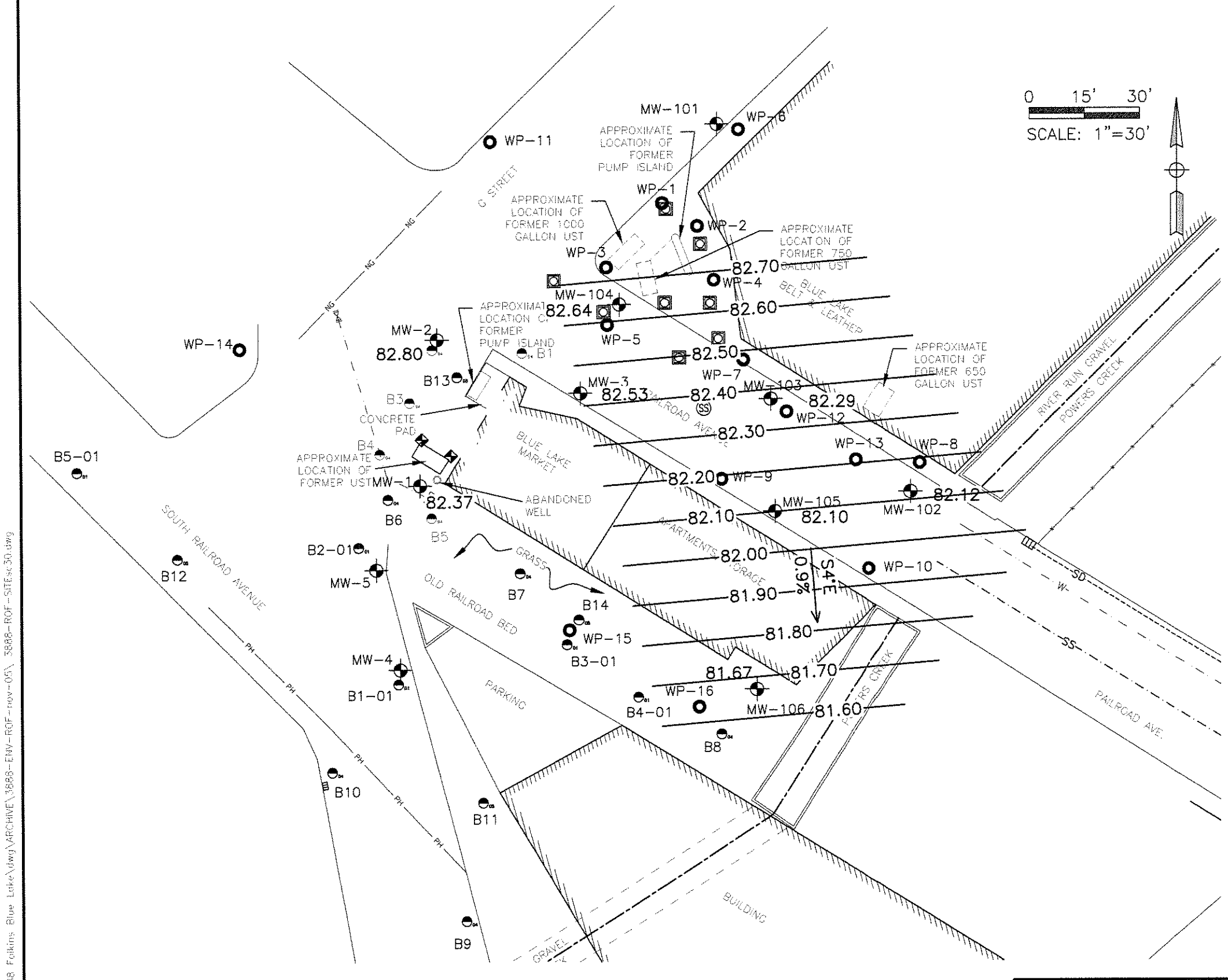
LACO ASSOCIATES
CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

REPORT OF FINDINGS/ BORING INSTALLATION
TPHg ISOCONCENTRATION MAP IN GROUNDWATER FOR MONITORING WELLS

PAT FOLKINS
BLUE LAKE MARKET
RAILROAD AVE, BLUE LAKE, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	TDN
APPVD	TDN
DATE	11/18/05
JOB NO.	3888.02
FIGURE	9

Nov 28,2005-12:25pm T:\CADFILES\3500\3888 Folkins Blue Lake\dwg\ARCHIVE\3888-ENV-ROF-nov-05\ 3888-ROF-SITE.st.30.dwg



LEGEND

- MW-1 — LACO MONITORING WELL
- MW-106 — SHN MONITORING WELL
- WELL POINT (SHN 1998)
- BORING (LACO 1994)
- BORING (LACO 2001)
- BORING (LACO 2004)
- BORING (LACO 2005)
- SOIL SAMPLE LOCATIONS
- SHN OZONE SPARGE WELL
- 82.2 — EQUIPOTENTIAL LINES (Feet, NAVD 88)
- 0.9% S4.3E — HYDRAULIC GRADIENT

GRADIENT BASED ON THREE-POINT CALCULATION USING MW102, MW104, & MW106

NO.	REVISION	BY	CHK	DATE

LACO ASSOCIATES
CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

REPORT OF FINDINGS/ BORING INSTALLATION
REVISED HYDRAULIC GRADIENT MAP (9/01/05)

PAT FOLKINS
BLUE LAKE MARKET
RAILROAD AVE, BLUE LAKE, CA

SCALE	1"=30'
DRAWN	RJM
CHECK	TDN
APPVD	
DATE	11/11/05
JOB NO.	3888.02
FIGURE	10

Nov 28,2005-12:24pm T:\CADFILES\3500\3888 Folkins Blue Lake\dwg\ARCHIVE\3888-ENV-ROF-nov-05\ 3888-ROF-SITE.sc30.dwg

TABLE 1: CURRENT AND HISTORIC LABORATORY ANALYTICAL RESULTS FOR SOIL
Blue Lake Market, 410 Railroad Avenue, Blue Lake, CA
LACO Project No. 3888.02; LOP No. 12229

Sample Identification	Depth (feet bgs)	Sample Date	TPHg (µg/g)	Benzene (µg/g)	Toluene (µg/g)	Ethylbenzene (µg/g)	Xylenes (µg/g)	MTBE (µg/g)	Organic Lead (µg/g)
2005 Investigation									
3888-B11-S4	4	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B11-S8	8	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B11-S11.5	11.5	9/13/2005	**1.8**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B11-S15.5	15.5	9/13/2005	**6.4**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B12-S4	4	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B12-S8	8	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B12-S12	12	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B12-S16	16	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B13-S1.6	1.6	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B13-S8	8	9/13/2005	**940**	ND<0.5	**1.2**	**9.2**	**93**	ND<5.0	---
3888-B13-S10	10	9/13/2005	**150**	**0.028**	**3.1**	**3.0**	**22.7**	ND<0.05	---
3888-B13-S12	12	9/13/2005	**1,300**	ND<0.5	ND<8.0	**6.7**	**30.7**	ND<5.0	---
3888-B13-S13.5	13.5	9/13/2005	**3,000**	ND<1.0	ND<20	**20**	**92.4**	ND<5.0	---
3888-B13-S16	16	9/13/2005	**1.5**	ND<0.005	ND<0.005	**0.0099**	**0.0391**	ND<0.05	---
3888-B14-S4	4	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-B14-S8	8	9/13/2005	**2.5**	**0.011**	ND<0.040	**0.014**	**0.019**	ND<0.05	---
3888-B14-S10	10	9/13/2005	**5.1**	**0.025**	ND<0.005	**0.018**	**0.029**	ND<0.05	---
3888-B14-S14	14	9/13/2005	**3.7**	**0.021**	ND<0.005	**0.046**	**0.012**	ND<0.05	---
3888-B14-S16	16	9/13/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-MW4-S8	8	9/14/2005	ND<1.0	ND<0.005	**0.0072**	ND<0.005	**0.0162**	ND<0.05	---
3888-MW4-S12	12	9/14/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-MW4-S14	14	9/14/2005	**6.6**	**0.012**	**0.023**	**0.047**	**0.029**	ND<0.05	---
3888-MW4-S16	16	9/14/2005	**1.3**	ND<0.005	ND<0.005	**0.0085**	**0.012**	ND<0.05	---
3888-MW5-S4	4	9/14/2005	**2.8**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-MW5-S8	8	9/14/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-MW5-S12	12	9/14/2005	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
3888-MW5-S16	16	9/14/2005	**1.5**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	---
									---
2004 Investigation									
B6	4	2/23/2004	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025	---
	5	2/23/2004	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025	---
	8	2/23/2004	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025	---
	12	2/23/2004	**130**	**0.029**	**0.018**	**0.55**	**0.18**	ND<0.025	---
B7	5.5	2/23/2004	ND<1.0	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025	---
	9	2/23/2004	**2.1**	**0.013**	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025	---
	13	2/23/2004	**1.5**	**0.035**	ND<0.0050	**0.0099**	**0.011**	ND<0.025	---
B8	---	2/23/2004	**No Soil Samples Collected**						
B9	---	2/23/2004	**No Soil Samples Collected**						
B10	---	2/23/2004	**No Soil Samples Collected**						
2001 Investigation									
B1-01	4	7/26/2001	ND < 1.0	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.050	ND<0.5
B1-01	9	7/26/2001	ND < 1.0	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.050	ND<0.5
B1-01	14	7/26/2001	**3.7**	**0.0075**	ND<0.03	**0.027**	**0.022**	ND<0.05	ND<0.5
B2-01	4	7/26/2001	ND < 1.0	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.050	ND<0.5
B2-01	9	7/26/2001	ND < 1.0	ND <0.005	ND <0.005	ND <0.005	ND <0.005	ND <0.050	ND<0.5
B2-01	14	7/26/2001	**4.7**	**0.02**	ND<0.02	**0.035**	**0.024**	ND <0.50	ND<0.5
B3-01	4	7/26/2001	ND<1.0	ND<0.005	ND<0.005	ND<0.005	**0.0053**	ND<0.05	ND<0.5
B3-01	9	7/26/2001	**2.4**	ND<0.005	ND<0.02	ND<0.005	**0.01**	ND<0.05	ND<0.5
B3-01	14	7/26/2001	**94**	ND<0.2	ND<0.8	**0.62**	**2.05**	ND<0.05	ND<0.5
B4-01	4	7/26/2001	**2.9**	**0.0068**	ND<0.03	**0.0093**	**0.015**	ND<0.05	ND<0.5
B4-01	9	7/26/2001	**17**	**0.017**	ND<0.2	ND<0.1	ND<0.1	ND<0.05	ND<0.5
B4-01	14	7/26/2001	**62**	**0.12**	ND<0.7	**0.27**	**0.26**	ND<0.05	ND<0.5
B5-01	4	7/27/2001	ND<1.0	ND<0.005	ND<0.005	ND<0.005	**0.0061**	ND<0.05	ND<0.5

TABLE 1: CURRENT AND HISTORIC LABORATORY ANALYTICAL RESULTS FOR SOIL
Blue Lake Market, 410 Railroad Avenue, Blue Lake, CA
LACO Project No. 3888.02; LOP No. 12229

Sample Identification	Depth (feet bgs)	Sample Date	TPHg (µg/g)	Benzene (µg/g)	Toluene (µg/g)	Ethylbenzene (µg/g)	Xylenes (µg/g)	MTBE (µg/g)	Organic Lead (µg/g)
B5-01	9	7/27/2001	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	ND<0.5
B5-01	14	7/27/2001	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	ND<0.5
1994 Investigation									
B1	17	9/13/1994	**2.5**	ND<0.0050	ND<0.030	**0.015**	**0.041**	---	---
B2	7	9/13/1994	**330**	ND<0.10	**1.7**	**3.0**	**27**	---	---
B3	5-9	9/13/1994	**770**	ND<.25	**1.7**	**3.8**	**46**	---	---
B4	9-14	9/13/1994	**25**	ND<0.0050	ND<0.040	ND<0.25	ND<0.25	---	---
B5	8.5	9/13/1994	**1,400**	ND<1.0	ND<10	**7.3**	**23**	---	---
1994 Investigation continued									
MW1	5-6.5	12/23/1994	ND<1.0	ND<0.0050	**0.0083**	ND<0.0050	**0.01**	---	---
	10-11.5	12/23/1994	**6.2**	**0.041**	ND<0.050	ND<0.050	ND<.10	---	---
	15.16.5	12/23/1994	**170**	ND<0.050	ND<0.10	ND<2.0	ND<2.0	---	ND<5.0
MW2	10-11.5	12/23/1994	**1,100**	ND<0.50	**16**	**14**	**102**	---	---
	15-16.5	12/23/1994	**1.9**	ND<0.0050	**0.028**	**0.039**	**0.236**	---	---
MW3	10-11.5	12/23/1994	**52**	**0.1**	**1.7**	**0.53**	**2.9**	---	---
	15-16.5	12/23/1994	**140**	**0.1**	ND<2.0	**0.65**	**2.77**	---	---
1990 Tank Removal									
East Sample	7	2/21/1990	**100**	ND<0.50	ND<0.50	**1.3**	**1.64**	---	---
West Sample	7	2/21/1990	**680**	ND<0.50	**3.7**	**7.3**	**48**	---	---

NOTES:
TPHg - total petroleum hydrocarbons as gasoline
MTBE - methyl tertiary butyl ether
Additional analytes include the fuel oxygenates
bgs = below ground surface
3888-B11-S4 = project number, boring B11, soil sample collected at 4 feet bgs
B1-01 = boring B1 installed in 2001
ND = non-detect at reporting limit shown
Bold results indicate analyte detection
--- = not sampled or analyzed
All results reported in micrograms per gram = µg/g

Table 2. Historic Soil Analytical Results - Borings; Blue Lake Belting and Leather Works; 411 Railroad Avenue; LOP No. 12012

Sample Identification	Depth (feet bgs)	Sample Date	TPHg (µg/g)	Benzene (µg/g)	Toluene (µg/g)	Ethylbenzene (µg/g)	Xylenes (µg/g)	MTBE (µg/g)
1998 Investigation								
WP1-12	12	5/13/1998	**1.5**	ND<0.005	ND<0.010	ND<0.005	ND<0.010	ND<0.05
WP2-12	12	5/13/1998	**1,400**	**5.1**	**49**	**23**	**138**	ND<13
WP3-12	12	5/13/1998	**200**	**0.62**	ND<1.5	**4.0**	**2.9**	ND<0.5
WP4-12	12	5/13/1998	**2,300**	**5.2**	**54**	**36**	**204**	ND<25
WP5-12	12	5/13/1998	**760**	**3.2**	**12**	**13**	**64**	ND<5
WP6-12	12	5/13/1998	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.213	ND<0.05
WP7-12	12	5/13/1998	**94**	**0.31**	**0.82**	**1.7**	**9.9**	ND<1.3
WP8-8	8	12/1/1998	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
WP9-8	8	12/1/1998	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
WP10-8	8	12/1/1998	**1.5**	**0.021**	**0.24**	**0.057**	**0.33**	ND<0.05
WP11-8	8	12/1/1998	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
WP12-8	8	12/1/1998	ND<1.0	ND<0.005	**0.032**	**0.037**	**0.211**	ND<0.05
WP13-8	8	12/1/1998	ND<1.0	ND<0.005	**0.017**	**0.011**	**0.098**	ND<0.05
WP14-6	6	12/1/1998	**1.1**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
WP15-6	6	12/1/1998	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
WP16-6	6	12/1/1998	ND<1.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05

NOTES:

TPHg - total petroleum hydrocarbons as gasoline

MTBE - methyl tertiary butyl ether

bgs = below ground surface

WP1-12 = well point 1, soil sample collected at 12 feet bgs

ND = non-detect at reporting limit shown

Bold results indicate analyte detection

--- = not sampled or analyzed

All results reported in micrograms per gram = µg/g

TABLE 3: CURRENT AND HISTORIC LABORATORY ANALYTICAL RESULTS FOR GROUNDWATER - BORINGS
Blue Lake Market, 410 Railroad Avenue, Blue Lake, CA
LACO Project No. 3888.02; LOP No. 12229

Boring Identification	Sample Date	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Additional Analytes (µg/L)	Organic Lead (µg/L)
2005 Investigation									
3888-B11-W	9/13/2005	**1,500**	**2.9**	**3.9**	**0.80**	**3.5**	ND<1.0	ND<1-10	---
3888-B12-W	9/13/2005	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-10	---
3888-B13-W	9/13/2005	**280,000**	**25**	**60**	**3,900**	**15,300**	ND<50	ND<50-500	---
3888-B14-W	9/13/2005	**3,300**	**210**	**34**	**110**	**63.2**	ND<50	ND<50-500	---
2004 Investigation									
B6	2/23/2004	**41,000**	**330**	**44**	**550**	**180**	ND<50	ND<50-100	---
B7	2/23/2004	**2,500**	**220**	**25**	**33**	**25.4**	ND<1.0	ND<1.0-10	---
B8	2/23/2004	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-10	---
B9	2/23/2004	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-10	---
B10	2/23/2004	**97**	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<1.0-10	---
2001 Investigation									
B1-01	7/27/2001	**1,900**	**74**	**16**	**33**	**8.8**	ND<1.0	All ND	ND<0.010
B2-01	7/27/2001	**2,800**	**180**	**24**	**67**	**17.4**	ND<1.0	All ND	ND<0.010
B3-01	7/27/2001	**17,000**	**370**	**76**	**440**	**756**	ND<1.0	All ND	ND<0.010
B4-01	7/27/2001	**1,900**	**110**	**13**	**26**	**22.3**	ND<1.0	All ND	ND<0.010
B5-01	7/27/2001	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0	All ND	ND<0.010
1994 Investigation									
B1	9/13/1994	**No Groundwater Samples Collected**							
B2	9/13/1994	**No Groundwater Samples Collected**							
B3	9/13/1994	**No Groundwater Samples Collected**							
B4	9/13/1994	**No Groundwater Samples Collected**							
B5	9/13/1994	**No Groundwater Samples Collected**							
1990 Tank Removal									
Cavity	2/21/1990	**4,300**	**250**	**410**	**240**	**1,200**	---	---	---
Abondoned Well	2/21/1990	**1,100**	**13**	**49**	**18**	**117**	---	---	---

NOTES:
TPHg - total petroleum hydrocarbons as gasoline
MTBE - methyl tertiary butyl ether
Additional analytes include the fuel oxygenates
3888-B11-W = project number, boring B11, water sample
B1-01 = boring B1 installed in 2001
ND = non-detect at reporting limit shown
Bold results indicate analyte detection
--- = not sampled or analyzed
All results reported in micrograms per liter = µg/L

Table 4: Historical Groundwater Analytical Results - Borings; Blue Lake Belting and Leather Works; 411 Railroad Avenue; LOP No. 12012

Boring Identification	Sample Date	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Lead (µg/L)
2005 Investigation								
WP1	5/13/1998	**930**	ND<8.0	ND<6.0	ND<5.0	ND<5.0	ND<5.0	**1,800**
WP2	5/13/1998	**460,000**	**3,000**	**16,000**	**3,800**	**19,500**	ND<10,000	**3,200**
WP3	5/13/1998	**62,000**	**2,000**	**980**	**2,700**	**3,430**	ND<2,500	**3,900**
WP4	5/13/1998	**150,000**	**2,900**	**14,000**	**4,000**	**20,700**	ND<10,000	**870**
WP5	5/13/1998	**40,000**	**460**	**620**	**1,300**	**1,720**	ND<1,000	**1,100**
WP6	5/13/1998	**210**	ND<0.50	**1.5**	**1.8**	**3.6**	ND<5.0	**830**
WP7	5/13/1998	**140,000**	**2,200**	**7,900**	**5,300**	**26,600**	ND<10,000	NA
WP8	12/1/1998	ND<50	ND<0.50	ND<0.5	ND<0.5	ND<0.5	ND<5.0	**170**
WP9	12/1/1998	**13,000**	**90**	**180**	**190**	**310**	**160**	**700**
WP10	12/1/1998	ND<50	ND<0.50	ND<0.5	ND<0.5	ND<0.5	ND<5.0	**760**
WP11	12/1/1998	ND<50	ND<0.50	ND<0.5	ND<0.5	ND<0.5	ND<5.0	**340**
WP12	12/1/1998	**8,800**	**14**	**100**	**55**	**22**	**69**	**510**
WP13	12/1/1998	**190**	ND<0.50	ND<0.5	ND<0.5	**0.94**	ND<5.0	**1,000**
WP14	12/1/1998	ND<50	ND<0.50	ND<0.5	ND<0.5	ND<0.5	ND<5.0	**190**
WP15	12/1/1998	ND<50	ND<0.50	ND<0.5	ND<0.5	ND<0.5	ND<5.0	**760**
WP16	12/1/1998	**56**	**1.1**	ND<0.5	ND<0.5	ND<0.5	ND<5.0	**220**

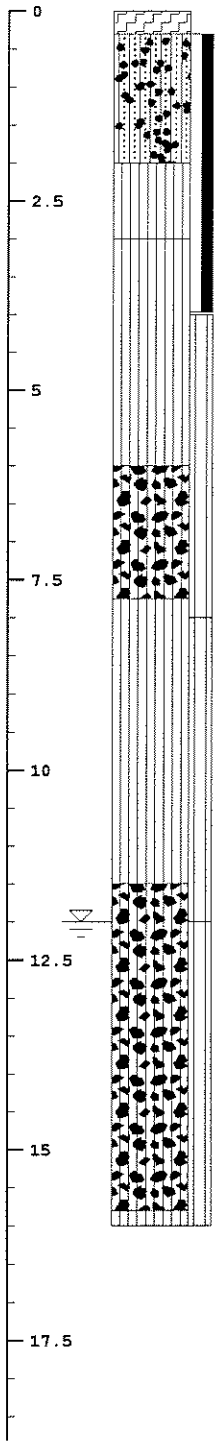
TPHg - total petroleum hydrocarbons as gasoline
MTBE - methyl tertiary butyl ether
WP1 = well point 1, water sample
ND = non-detect at reporting limit shown
Bold results indicate analyte detection
NA = not sampled or analyzed
All results reported in micrograms per liter = µg/L

Attachment 1

ENVIRONMENTAL BORING LOG

Boring No. B11

PROJECT: BLUE LAKE MARKET
PROJECT NO.: 3888.02
BORING LOCATION: BRICK AREA, SCHULL PARKING LOT
DATE: 9/13/2005
DRILLING METHOD: DIRECT PUSH
ELEVATION: APPROX. 85 FEET NAVD
DRILLER: LACO ASSOCIATES
LOGGED BY:
DEPTH TO WATER: **INITIAL** ▽ : 12.0 **COMPLETION** ▽ : NA
SITE GEOLOGY: UPLIFTED FLUVIAL AND FLOODPLAIN DEPOSITS



ELEVATION/ DEPTH	SOIL SYMBOLS, SAMPLERS AND TEST DATA	USCS	Description	P.I.D. ppm	Hanby result
		VG	BRICK: 4-inches AGGREGATE BASE		
		ML	SANDY SILT; Dark brown, firm-stiff, moist; Approximately 55% silt, 5% clay, 40% fine sand, minor organics; No hydrocarbon odor or staining.		
		ML	SILT WITH SAND; Brown, firm-stiff, moist; Approximately 80% silt, 5% clay, 15% fine sand; No hydrocarbon odor or staining.		
		GM	SILTY GRAVEL WITH SAND; Brown, loose-medium dense, dry to moist; Approximately 50% well graded subangular to subrounded gravel, 25% well graded sand, 25% silt; No hydrocarbon odor or staining.		
		ML	SILT WITH SAND; Brown, soft-stiff, moist; Approximately 65% silt, 15% clay, low plasticity, 20% fine sand; Slight hydrocarbon odor, no staining.		
		GM	SILTY GRAVEL WITH SAND; Blue-gray, medium dense, moist; Approximately 50% fine subangular to subrounded gravel, 25% well graded sand, 25% silt; Slight hydrocarbon odor, no staining.		
		ML	SILT WITH SAND; Brown, firm-stiff, moist; Approximately 75% silt, 5% clay, low to medium plasticity, 20% fine and medium sand; No hydrocabon odor or staining. HALT AT 16 FEET BGS.		

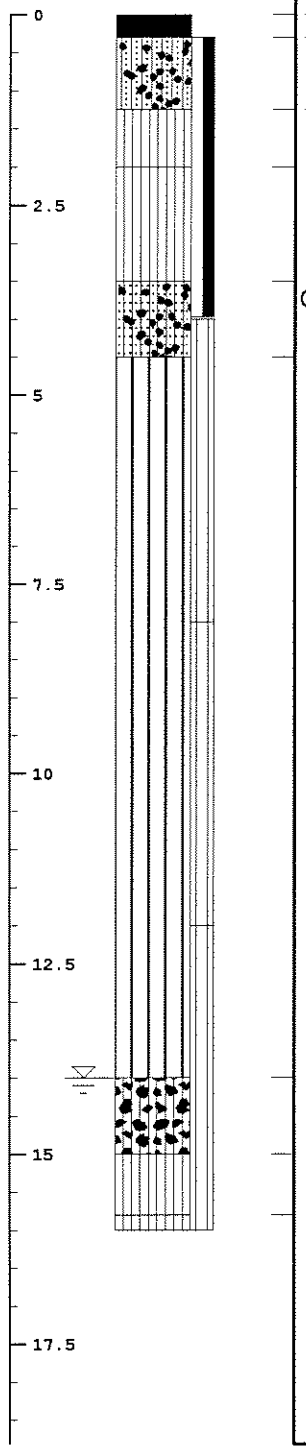
Hand auger to 4 feet bgs. Soil samples collected at 4ft, 8ft, 11.5ft, and 15.5ft bgs; grab groundwater samples collected with dedicated PVC tubing equipped with a check valve.

Figure _____

ENVIRONMENTAL BORING LOG

Boring No. B12

PROJECT: BLUE LAKE MARKET
PROJECT NO.: 3888.02
BORING LOCATION: S SIDE OF
DATE: 9/13/2005
DRILLING METHOD: DIRECT PUSH
ELEVATION: APPROX. 85 FEET NAVD
DRILLER: LACO ASSOCIATES
LOGGED BY:
DEPTH TO WATER: **INITIAL** ▽ : 14.0 **COMPLETION** ▼ : NA
SITE GEOLOGY: UPLIFTED FLUVIAL AND FLOODPLAIN DEPOSITS



ELEVATION/ DEPTH	SOIL SYMBOLS, SAMPLERS AND TEST DATA	USCS	Description	P.I.D. ppm	Hanby result
		VG	ASPHALT AGGREGATE BASE		
		ML	SANDY SILT; Dark-brown, stiff-firm, dry to moist; Approximately 55% silt, 10% clay, 35% fine and medium sand; No hydrocarbon odor or staining.		
		ML	SANDY SILT; Light to dark brown, stiff to firm, dry; Approximately 65% silt, 5% clay, medium plasticity, 30% fine and medium sand; No hydrocarbon odor or staining.		
		GP-GM	POORLY GRADED GRAVEL WITH SILT AND SAND; Dark brown, loose, dry to moist; Approximately 50% fine and medium subangular to subrounded gravel, 40% fine and medium sand, 10% silt; No hydrocarbon odor or staining.		
		MH	SILT; Dark brown, stiff, moist to wet; Approximately 70% silt, 20% clay, 10% fine and medium sand; Interbedded with gravel lenses at 5.75' to 6.0'bgs and 7.75' to 8.0' bgs; No hydrocarbon odor or staining.		
		GM	SILTY GRAVEL WITH SAND; Dark brown with mottling, loose, saturated; Approximately 50% fine, subrounded gravel, 25% fine sand, 25% silt; No hydrocarbon odor or staining.		
		ML	SILT; Dark brown, stiff, moist to wet; Approximately 70% silt, 20% clay, 10% fine sand; No hydrocarbon odor or staining.		
		ML	SILT WITH SAND; Dark gray to black, medium dense to dense, moist to wet. Approximately 60% silt, 20% clay, 10% fine sand, 10% fine and medium, subangular to subrounded gravel; Slight organic odor; no hydrocarbon staining. HALT AT 16 FEET BGS		

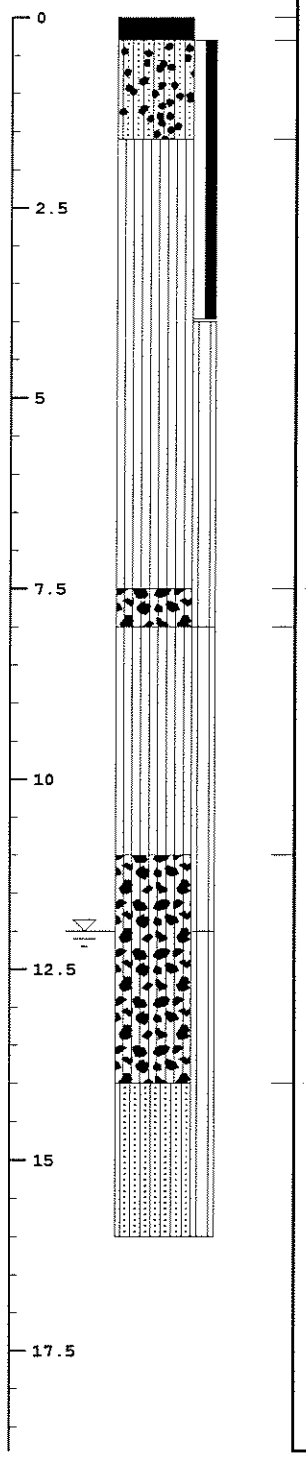
Hand auger to 4 feet bgs. Soil samples collected at 4ft, 8ft, 13.5ft, and 16ft bgs; grab groundwater samples collected with dedicated PVC tubing equipped with a check valve.

Figure _____

ENVIRONMENTAL BORING LOG

Boring No. B13

PROJECT: BLUE LAKE MARKET
PROJECT NO.: 3888.02
BORING LOCATION: 8 FEET SW OF MW2
DATE: 9/13/2005
DRILLING METHOD: DIRECT PUSH
ELEVATION: APPROX. 90 FEET NAVD
DRILLER: LACO ASSOCIATES
LOGGED BY:
DEPTH TO WATER: **INITIAL** ▽ : 12.0 **COMPLETION** ▽ : NA
SITE GEOLOGY: UPLIFTED FLUVIAL AND FLOODPLAIN DEPOSITS



ELEVATION/ DEPTH	SOIL SYMBOLS, SAMPLERS AND TEST DATA	USCS	Description	P.I.D. ppm	Hanby result
		VG	ASPHALT AGGREGATE BASE		
		ML	SANDY SILT; Dark brown, stiff to hard, moist; Approximately 55% silt, 10% clay, medium to high plasticity, 35% fine sand; Slight hydrocarbon odor, no staining.		
		GM	SILTY GRAVEL WITH SAND; Dark gray to brown, loose, moist to wet; Approximately 50% fine and medium gravel, 30% fine sand, 20% silt; Strong hydrocarbon odor, no staining.	1534	
		ML	SANDY SILT; Dark brown with gray streaking, stiff to hard, moist to wet; Approximately 60% silt, 10% clay, medium to high plasticity, 30% fine sand; Medium hydrocarbon odor, no staining.		
		GM	SILTY GRAVEL WITH SAND; Dark gray to brown, loose, moist to wet; Approximatley 50% fine and medium gravel, 30% fine sand, 20% silt; Strong hydrocarbon odor, no staining.	425-801	
		SM	SILTY SAND WITH GRAVEL; Dark gray to brown, loose to medium dense, moist to wet; Approximatley 45% well graded sand, 30% well graded gravel, 20% silt, 5% clay. Strong hydrocarbon odor, no staining.	87	
			HALT AT 16 FEET BGS.		

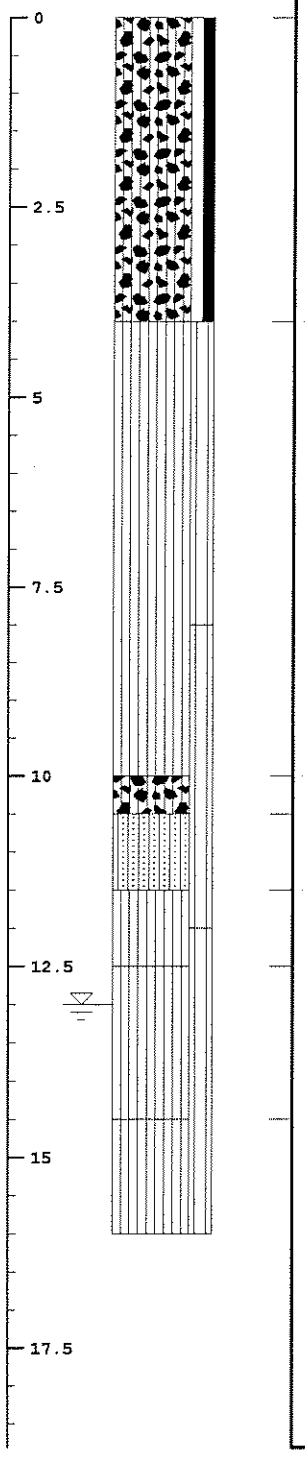
Hand auger to 4 feet bgs. Soil samples collected at 1.6ft, 8ft, 10ft, 12ft, and 16ft bgs; grab groundwater samples collected with dedicated PVC tubing equipped with a check valve.

Figure _____

ENVIRONMENTAL BORING LOG

Boring No. B14

PROJECT: BLUE LAKE MARKET
PROJECT NO.: 3888.02
BORING LOCATION: 60 FEET SE OF MW1
DATE: 9/13/2005
DRILLING METHOD: DIRECT PUSH
ELEVATION: APPROX. 88 FEET NAVD
DRILLER: LACO ASSOCIATES
LOGGED BY:
DEPTH TO WATER: **INITIAL** ▽ : 13.0 **COMPLETION** ▼ : NA
SITE GEOLOGY: UPLIFTED FLUVIAL AND FLOODPLAIN DEPOSITS



ELEVATION/ DEPTH	SOIL SYMBOLS, SAMPLERS AND TEST DATA	USCS	Description	P.I.D. ppm	Hanby result
		GM	SILTY SAND WITH GRAVEL; Light to dark brown, loose, dry to moist; Approximately 60% well graded sand, 25% fine gravel, 15% silt; No hydrocarbon odor or staining.		
		ML	SANDY SILT; Dark brown, hard, wet; Approximately 55% silt, 15% clay medium to high plasticity, 30% fine sand; Gravel lens at 4.5'to 4.8' bgs; Slight hydrocarbon odor at approximately 8' bgs, no staining.	40	
		GM SM	SILTY GRAVEL WITH SAND; Dark gray to brown, medium dense to dense, moist to wet; Approximately 45% fine and medium subangular to subrounded gravel, 25% fine and medium sand, 25% silt, 5% clay; Medium hydocarbon odor, no staining.	214	
		ML	SILTY SAND; Dark gray, medium dense to dense, moist to wet; Approximately 60% fine and medium sand, 30% silt, 10% clay; Strong hydrocarbon odor, no staining.	302	
		ML	SANDY SILT; Dark brown, stiff to hard, moist to wet; Approximately 55% silt, 15% clay medium to high plasticity, 30% fine sand; Slight hydrocarbon odor, no staining.		
		ML	GRAVELY SILT WITH SAND; Dark gray to brown, medium dense to dense, moist to wet; Approximately 40% silt, 5% clay, 30% fine and medium subangular to subrounded gravel, 25% fine and medium sand; Slight hydrocarbon odor, no staining.		
			SANDY SILT; Dark brown, stiff to hard, moist to wet; Approximately 55% silt, 15% clay medium to high plasticity, 30% fine and medium sand; 1.5 inch thick gravel layer at 14.9 feet bgs. Slight hydrocarbon odor, no staining.		
			HALT AT 16 FEET BGS.		

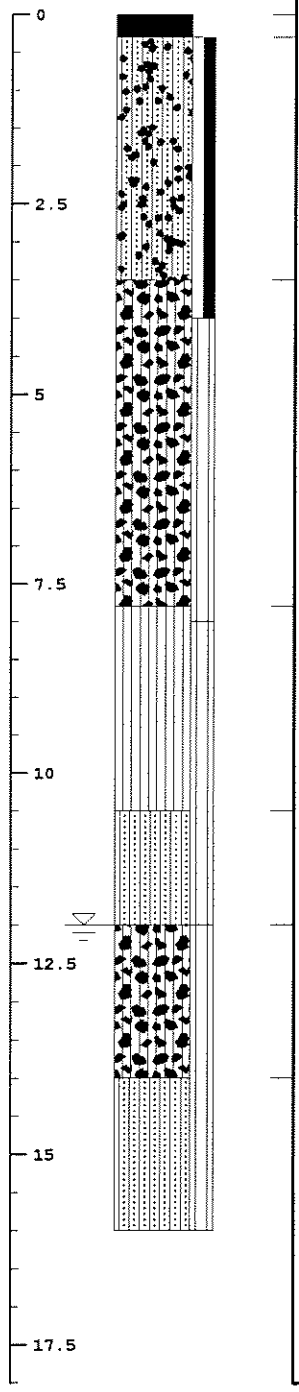
Hand auger to 4 feet bgs. Soil samples collected at 4ft, 8ft, 11ft, 14ft, and 16ft bgs; grab groundwater samples collected with dedicated PVC tubing equipped with a check valve.

Figure _____

MONITORING WELL LOG

Well No. MW4

PROJECT: BLUE LAKE MARKET
PROJECT NO.: 3888.02
BORING LOCATION: 50 FEET SOUTH OF MW1
DATE: 9/14/2005
DRILLING METHOD: DIRECT PUSH
ELEVATION: APPROX. 85 FEET NAVD
DRILLER: LACO ASSOCIATES
LOGGED BY:
DEPTH TO WATER: **INITIAL** ▽ : 12.0 **COMPLETION** ▼ : N/A
SITE GEOLOGY: UPLIFTED FLUVIAL AND FLOODPLAIN DEPOSITS
WELL CASING: 0'-10' BGS
WELL SCREEN AND INTERVAL: 10'-15' BGS
SEAL AND INTERVAL: 0'-9' BGS
SAND PACK AND INTERVAL: 9'-15' BGS



ELEVATION/ DEPTH	SOIL SYMBOLS, SAMPLERS AND TEST DATA	USCS	Description	P.I.D ppm	Hanby Result	Well Construction Diagram
		VG	ASPHALT AGGREGATE BASE			
		GM	SILTY GRAVEL WITH SAND; Dark gray to brown, loose to medium dense, dry to moist; Approximately 60% fine and medium gravel, 15% fine sand, 25% silt, <10% organics at 6.5' to 7' bgs; No hydrocarbon odor or staining.			
		ML	SILT WITH SAND; Dark brown with mottling, stiff to hard, moist to wet; Approximately 65% silt, 15% clay high plasticity, 20% fine sand; No hydrocarbon odor or staining.	0		
		SM	SILTY SAND; Dark gray, medium dense, wet to saturated; Approximately 60% fine sand, 35% silt, 5% clay; No hydrocarbon odor or staining.	0		
		GM	SILTY GRAVEL WITH SAND; Dark gray, loose, wet to saturated; Approximately 50% fine and medium gravel, 25% fine and medium sand, 25% silt; <5% organics at 13.5' to 14' bgs; No hydrocarbon or staining.	0		
		SM	SILTY SAND WITH GRAVEL; Dark brown to gray, loose to medium dense, moist to wet; Approximately 40% fine and medium sand, 25% fine and medium gravel, 30% silt, 5% clay; No hydrocarbon odor or staining.	0		
			HALT AT 16 FEET BGS	0		

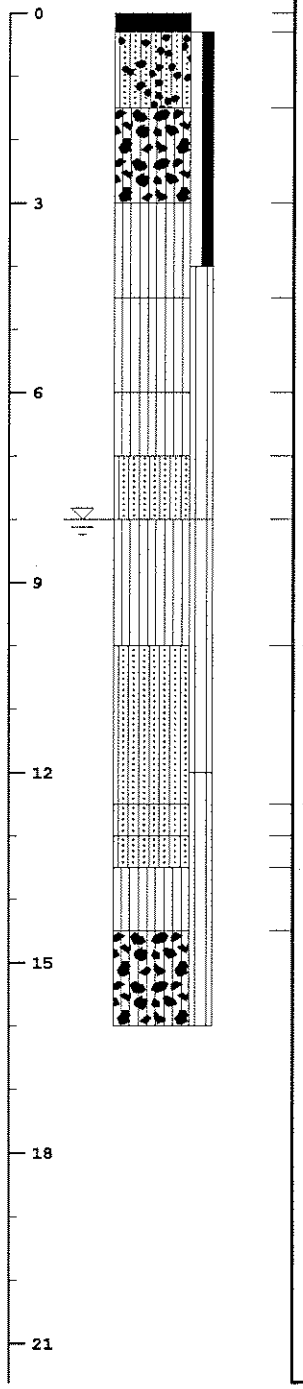
Hand auger to 4 feet bgs. Soil samples collected at 8ft, 12ft, 14ft, and 16ft bgs; grab groundwater samples collected with dedicated PVC tubing equipped with a check valve.

Figure _____

MONITORING WELL LOG

Well No. MW5

PROJECT: BLUE LAKE MARKET
PROJECT NO.: 3888.02
BORING LOCATION: 30 FEET SOUTH OF MW1
DATE: 9/14/2005
DRILLING METHOD: DIRECT PUSH
ELEVATION: APPROX. 85 FEET NAVD
DRILLER: LACO ASSOCIATES
LOGGED BY:
DEPTH TO WATER: **INITIAL** ▽ : 8.0 **COMPLETION** ▽ : N/A
SITE GEOLOGY: UPLIFTED FLUVIAL AND FLOODPLAIN DEPOSITS
WELL CASING: 0'-10' BGS
WELL SCREEN AND INTERVAL: 10'-15' BGS
SEAL AND INTERVAL: 0'-9' BGS
SAND PACK AND INTERVAL: 9'-15' BGS



ELEVATION/ DEPTH	SOIL SYMBOLS, SAMPLERS AND TEST DATA	USCS	Description	P.I.D ppm	Hanby Result	Well Construction Diagram
		VG	ASPHALT AGGREGATE BASE			
		GM	SILTY GRAVEL WITH SAND; Dark gray, medium dense, moist; Approximately 40% well graded gravel, 25% fine sand, 30% silt, 5% clay; No hydrocarbon odor or staining.			
		ML	SANDY SILT; Dark brown, firm to stiff, moist to wet; Approximately 50% silt, 20% clay, medium to high plasticity, 30% fine sand; No hydrocarbon odor or staining.	0		
		ML	SILT WITH SAND; Dark brown, firm, wet to saturated; Approximatley 55% silt, 20% clay, low to medium plasticity, 25% fine sand; No hydrocarbon odor or staining.			
		ML	SANDY SILT; Dark brown, stiff to firm, moist to wet; Approximately 40% silt, 30% clay, high plasticity, 30% fine			
		SM	sand; No hydrocarbon odor or staining.			
		ML	SILTY SAND; Dark brown, medium dense, wet to saturated; Approximately 50% fine sand, 40% silt, 10% clay; No hydrocarbon odor or staining.	0		
		SM	SANDY SILT; Dark brown, stiff to hard, moist to wet; Approximately 40% silt, 30% clay, high plasticity, 30% fine sand; No hydrocarbon odor or staining.	3		
			SILTY SAND WITH GRAVEL; Dark gray, medium dense, wet to saturated; Approximately 50% fine and medium sand, 25% fine gravel, 20% silt, 5% clay; Slight hydrocarbon odor, no staining.			
		SM	SILTY SAND; Dark brown, dense, moist to wet;			
		SM	Approximately 50% fine and medium sand, 40% silt, 10% clay;	0		
		ML	No hydrocarbon odor or staining.	0		
		GM	SILTY SAND; Dark gray, loose, saturated; Approximately 65% well graded sand, 5% fine gravel, 25% silt, 5% clay; Slight hydrocarbon odor, no staining.	0		
			SANDY SILT WITH GRAVEL; Dark gray to brown, firm to stiff, wet to saturated; Approximately 50% silt, 10% clay, 20% well graded sand, 20% fine and medium gravel; <5% organics at 13'-13.5' bgs; No hydrocarbon odor or staining.			
			SILTY GRAVEL WITH SAND; Dark gray to brown, loose, wet to saturated; Approximately 45% fine and medium gravel, 40% fine and medium sand, 15% silt; Slight hydrocarbon odor, no staining.			
			HALT AT 16 FEET BGS			

Hand auger to 4 feet bgs. Soil samples collected at 4ft, 8ft, 12ft, and 16ft bgs; grab groundwater samples collected with dedicated PVC tubing equipped with a check valve.

Figure _____

Attachment 2

NORTH COAST
LABORATORIES LTD.

RECEIVED
LACO ASSOCIATES
SEP 2 8 2005
BY: JG

September 27, 2005

Pvt. cust. paying on pickup

DRG

,

TDN

Attn: Pat Folkins

RE: 3888.01, Blue Lake Market

Order No.: 0509275
Invoice No.: 53092
PO No.:
ELAP No. 1247-Expires July 2006

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	3888-B11-S4
02A	3888-B11-S8
03A	3888-B11-S11.5
04A	3888-B11-S15.5
05A	3888-B12-S4
06A	3888-B12-S8
07A	3888-B12-S12
08A	3888-B12-S16
09A	3888-B13-S1.6
10A	3888-B13-S8
11A	3888-B13-S10
12A	3888-B13-S12
13A	3888-B13-S13.5
14A	3888-B13-S16
15A	3888-B14-S4
16A	3888-B14-S8
17A	3888-B14-S10
18A	3888-B14-S11
19A	3888-B14-S14
20A	3888-B14-S16
21A	3888-B11-W
22A	3888-B12-W
23A	3888-B13-W
24A	3888-B14-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s) | QA Unit | Jesse G. Chaney, Jr. Laboratory Director

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CLIENT: Pvt. cust. paying on pickup
Project: 3888.01, Blue Lake Market
Lab Order: 0509275

CASE NARRATIVE

TPH as Gasoline - Soil:
Samples 3888-B11-S11.5 and 3888-B11-S15.5 do not present a peak pattern consistent with that of gasoline. The reported results represent the amount of material in the gasoline range.

Samples 3888-B13-S8, 3888-B13-S10, 3888-B13-S12, 3888-B13-S13.5 and 3888-B13-S16 appear to be similar to gasoline but certain peak ratios are not that of a fresh gasoline standard. The reported results represent the amount of material in the gasoline range.

The gasoline values for samples 3888-B14-S8, 3888-B14-S10, 3888-B14-S11 and 3888-B14-S14 include the reported gasoline components in addition to other peaks in the gasoline range.

BTEX - Soil:
Some reporting limits were raised for samples 3888-B11-S11.5, 3888-B11-S15.5, 3888-B14-S8, 3888-B14-S10, 3888-B14-S11 and 3888-B14-S14 due to matrix interference.

Samples 3888-B13-S12 and 3888-B13-S13.5 were diluted and the reporting limits were raised additionally due to matrix interference.

Samples 3888-B13-S8, 3888-B13-S12 and 3888-B13-S13.5 were reported as ND with a dilution due to matrix interference.

Gasoline Components/Additives - Water:
Samples 3888-B11-W, 3888-B13-W and 3888-B14-W appear to be similar to gasoline but certain peak ratios are not that of a fresh gasoline standard. The reported results represent the amount of material in the gasoline range.

Sample 3888-B13-W was reported as ND with a dilution due to matrix interference.

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Date: 27-Sep-05
WorkOrder: 0509275

ANALYTICAL REPORT

Client Sample ID: 3888-B11-S4 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-01A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/23/05
Benzene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Toluene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
o-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Surrogate: Cis-1,2-Dichloroethylene	103	71.8-135	% Rec	1.0	9/23/05	9/23/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	9/23/05	9/23/05

Client Sample ID: 3888-B11-S8 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-02A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/23/05
Benzene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Toluene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
o-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Surrogate: Cis-1,2-Dichloroethylene	102	71.8-135	% Rec	1.0	9/23/05	9/23/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	9/23/05	9/23/05

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Date: 27-Sep-05
WorkOrder: 0509275

ANALYTICAL REPORT

Client Sample ID: 3888-B11-S11.5 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-03A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/23/05
Benzene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Toluene	ND	0.020	µg/g	1.0	9/23/05	9/23/05
Ethylbenzene	ND	0.010	µg/g	1.0	9/23/05	9/23/05
m,p-Xylene	ND	0.010	µg/g	1.0	9/23/05	9/23/05
o-Xylene	ND	0.010	µg/g	1.0	9/23/05	9/23/05
Surrogate: Cis-1,2-Dichloroethylene	96.6	71.8-135	% Rec	1.0	9/23/05	9/23/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1.8	1.0	µg/g	1.0	9/23/05	9/23/05

Client Sample ID: 3888-B11-S15.5 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-04A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/23/05
Benzene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Toluene	ND	0.080	µg/g	1.0	9/23/05	9/23/05
Ethylbenzene	ND	0.020	µg/g	1.0	9/23/05	9/23/05
m,p-Xylene	ND	0.030	µg/g	1.0	9/23/05	9/23/05
o-Xylene	ND	0.010	µg/g	1.0	9/23/05	9/23/05
Surrogate: Cis-1,2-Dichloroethylene	97.8	71.8-135	% Rec	1.0	9/23/05	9/23/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	6.4	1.0	µg/g	1.0	9/23/05	9/23/05

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ANALYTICAL REPORT

Client Sample ID: 3888-B12-S4 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-05A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/23/05
Benzene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Toluene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
o-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Surrogate: Cis-1,2-Dichloroethylene	103	71.8-135	% Rec	1.0	9/23/05	9/23/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	9/23/05	9/23/05

Client Sample ID: 3888-B12-S8 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-06A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/23/05
Benzene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Toluene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
o-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/23/05
Surrogate: Cis-1,2-Dichloroethylene	98.8	71.8-135	% Rec	1.0	9/23/05	9/23/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	9/23/05	9/23/05

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ANALYTICAL REPORT

Client Sample ID: 3888-B12-S12 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-07A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/24/05
Benzene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Toluene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
o-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Surrogate: Cis-1,2-Dichloroethylene	99.6	71.8-135	% Rec	1.0	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	9/23/05	9/24/05

Client Sample ID: 3888-B12-S16 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-08A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/24/05
Benzene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Toluene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
o-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Surrogate: Cis-1,2-Dichloroethylene	99.5	71.8-135	% Rec	1.0	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	9/23/05	9/24/05

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ANALYTICAL REPORT

Client Sample ID: 3888-B13-S1.6 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-09A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/24/05
Benzene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Toluene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
o-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Surrogate: Cis-1,2-Dichloroethylene	98.4	71.8-135	% Rec	1.0	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	9/23/05	9/24/05

Client Sample ID: 3888-B13-S8 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-10A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	5.0	µg/g	100	9/23/05	9/24/05
Benzene	ND	0.50	µg/g	100	9/23/05	9/24/05
Toluene	1.2	0.50	µg/g	100	9/23/05	9/24/05
Ethylbenzene	9.2	0.50	µg/g	100	9/23/05	9/24/05
m,p-Xylene	67	5.0	µg/g	1,000	9/23/05	9/26/05
o-Xylene	26	5.0	µg/g	1,000	9/23/05	9/26/05
Surrogate: Cis-1,2-Dichloroethylene	93.6	71.8-135	% Rec	100	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	940	100	µg/g	100	9/23/05	9/24/05

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ANALYTICAL REPORT

Client Sample ID: 3888-B13-S10 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-11A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/24/05
Benzene	0.028	0.0050	µg/g	1.0	9/23/05	9/24/05
Toluene	3.1	0.50	µg/g	100	9/23/05	9/26/05
Ethylbenzene	3.0	0.50	µg/g	100	9/23/05	9/26/05
m,p-Xylene	16	0.50	µg/g	100	9/23/05	9/26/05
o-Xylene	6.7	0.50	µg/g	100	9/23/05	9/26/05
Surrogate: Cis-1,2-Dichloroethylene	104	71.8-135	% Rec	1.0	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	150	10	µg/g	10	9/23/05	9/26/05

Client Sample ID: 3888-B13-S12 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-12A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	5.0	µg/g	100	9/23/05	9/24/05
Benzene	ND	0.50	µg/g	100	9/23/05	9/24/05
Toluene	ND	8.0	µg/g	100	9/23/05	9/24/05
Ethylbenzene	6.7	0.50	µg/g	100	9/23/05	9/24/05
m,p-Xylene	27	0.50	µg/g	100	9/23/05	9/24/05
o-Xylene	3.7	0.50	µg/g	100	9/23/05	9/24/05
Surrogate: Cis-1,2-Dichloroethylene	94.2	71.8-135	% Rec	100	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1,300	100	µg/g	100	9/23/05	9/24/05

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ANALYTICAL REPORT

Client Sample ID: 3888-B13-S13.5 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-13A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	5.0	µg/g	100	9/23/05	9/24/05
Benzene	ND	1.0	µg/g	100	9/23/05	9/24/05
Toluene	ND	20	µg/g	1,000	9/23/05	9/26/05
Ethylbenzene	20	5.0	µg/g	1,000	9/23/05	9/26/05
m,p-Xylene	83	5.0	µg/g	1,000	9/23/05	9/26/05
o-Xylene	9.4	5.0	µg/g	1,000	9/23/05	9/26/05
Surrogate: Cis-1,2-Dichloroethylene	96.5	71.8-135	% Rec	100	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	3,000	100	µg/g	100	9/23/05	9/24/05

Client Sample ID: 3888-B13-S16 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-14A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/24/05
Benzene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Toluene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Ethylbenzene	0.0099	0.0050	µg/g	1.0	9/23/05	9/24/05
m,p-Xylene	0.030	0.0050	µg/g	1.0	9/23/05	9/24/05
o-Xylene	0.0091	0.0050	µg/g	1.0	9/23/05	9/24/05
Surrogate: Cis-1,2-Dichloroethylene	92.8	71.8-135	% Rec	1.0	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1.5	1.0	µg/g	1.0	9/23/05	9/24/05

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WorkOrder: 0509275

ANALYTICAL REPORT

Client Sample ID: 3888-B14-S4 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-15A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/24/05
Benzene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Toluene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
o-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Surrogate: Cis-1,2-Dichloroethylene	96.7	71.8-135	% Rec	1.0	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	9/23/05	9/24/05

Client Sample ID: 3888-B14-S8 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-16A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/24/05
Benzene	0.011	0.0050	µg/g	1.0	9/23/05	9/24/05
Toluene	ND	0.040	µg/g	1.0	9/23/05	9/24/05
Ethylbenzene	0.014	0.0050	µg/g	1.0	9/23/05	9/24/05
m,p-Xylene	0.019	0.0050	µg/g	1.0	9/23/05	9/24/05
o-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Surrogate: Cis-1,2-Dichloroethylene	95.1	71.8-135	% Rec	1.0	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	2.5	1.0	µg/g	1.0	9/23/05	9/24/05

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ANALYTICAL REPORT

Client Sample ID: 3888-B14-S10 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-17A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/24/05
Benzene	0.025	0.0050	µg/g	1.0	9/23/05	9/24/05
Toluene	ND	0.050	µg/g	1.0	9/23/05	9/24/05
Ethylbenzene	0.018	0.0050	µg/g	1.0	9/23/05	9/24/05
m,p-Xylene	0.029	0.0050	µg/g	1.0	9/23/05	9/24/05
o-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Surrogate: Cis-1,2-Dichloroethylene	101	71.8-135	% Rec	1.0	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	5.1	1.0	µg/g	1.0	9/23/05	9/24/05

Client Sample ID: 3888-B14-S11 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-18A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/24/05
Benzene	0.012	0.0050	µg/g	1.0	9/23/05	9/24/05
Toluene	ND	0.040	µg/g	1.0	9/23/05	9/24/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
m,p-Xylene	0.012	0.0050	µg/g	1.0	9/23/05	9/24/05
o-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Surrogate: Cis-1,2-Dichloroethylene	98.2	71.8-135	% Rec	1.0	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	2.5	1.0	µg/g	1.0	9/23/05	9/24/05

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ANALYTICAL REPORT

Client Sample ID: 3888-B14-S14 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-19A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/24/05
Benzene	0.021	0.0050	µg/g	1.0	9/23/05	9/24/05
Toluene	ND	0.050	µg/g	1.0	9/23/05	9/24/05
Ethylbenzene	0.046	0.0050	µg/g	1.0	9/23/05	9/24/05
m,p-Xylene	0.012	0.0050	µg/g	1.0	9/23/05	9/24/05
o-Xylene	ND	0.010	µg/g	1.0	9/23/05	9/24/05
Surrogate: Cis-1,2-Dichloroethylene	98.8	71.8-135	% Rec	1.0	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	3.7	1.0	µg/g	1.0	9/23/05	9/24/05

Client Sample ID: 3888-B14-S16 **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-20A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/23/05	9/24/05
Benzene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Toluene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
o-Xylene	ND	0.0050	µg/g	1.0	9/23/05	9/24/05
Surrogate: Cis-1,2-Dichloroethylene	88.1	71.8-135	% Rec	1.0	9/23/05	9/24/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	9/23/05	9/24/05

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Date: 27-Sep-05
WorkOrder: 0509275

ANALYTICAL REPORT

Client Sample ID: 3888-B11-W **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-21A

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		9/23/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		9/23/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		9/23/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		9/23/05
Benzene	2.9	0.50	µg/L	1.0		9/23/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		9/23/05
Toluene	3.9	0.50	µg/L	1.0		9/23/05
Ethylbenzene	0.80	0.50	µg/L	1.0		9/23/05
m,p-Xylene	3.5	0.50	µg/L	1.0		9/23/05
o-Xylene	ND	0.50	µg/L	1.0		9/23/05
Surrogate: 1,4-Dichlorobenzene-d4	90.2	80.8-139	% Rec	1.0		9/23/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	1,500	50	µg/L	1.0		9/23/05

Client Sample ID: 3888-B12-W **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-22A

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		9/23/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		9/23/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		9/23/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		9/23/05
Benzene	ND	0.50	µg/L	1.0		9/23/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		9/23/05
Toluene	ND	0.50	µg/L	1.0		9/23/05
Ethylbenzene	ND	0.50	µg/L	1.0		9/23/05
m,p-Xylene	ND	0.50	µg/L	1.0		9/23/05
o-Xylene	ND	0.50	µg/L	1.0		9/23/05
Surrogate: 1,4-Dichlorobenzene-d4	92.6	80.8-139	% Rec	1.0		9/23/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	ND	50	µg/L	1.0		9/23/05

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ANALYTICAL REPORT

Client Sample ID: 3888-B13-W **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-23A

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	50	µg/L	50		9/22/05
Tert-butyl alcohol (TBA)	ND	500	µg/L	50		9/22/05
Di-isopropyl ether (DIPE)	ND	50	µg/L	50		9/22/05
Ethyl tert-butyl ether (ETBE)	ND	50	µg/L	50		9/22/05
Benzene	25	25	µg/L	50		9/22/05
Tert-amyl methyl ether (TAME)	ND	50	µg/L	50		9/22/05
Toluene	60	25	µg/L	50		9/22/05
Ethylbenzene	3,900	50	µg/L	100		9/22/05
m,p-Xylene	13,000	500	µg/L	1,000		9/22/05
o-Xylene	2,300	50	µg/L	100		9/22/05
Surrogate: 1,4-Dichlorobenzene-d4	100	80.8-139	% Rec	50		9/22/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	280,000	5,000	µg/L	100		9/22/05

Client Sample ID: 3888-B14-W **Received:** 9/15/05 **Collected:** 9/13/05 0:00
Lab ID: 0509275-24A

Test Name: Gasoline Components/Additives **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Methyl tert-butyl ether (MTBE)	ND	1.0	µg/L	1.0		9/23/05
Tert-butyl alcohol (TBA)	ND	10	µg/L	1.0		9/23/05
Di-isopropyl ether (DIPE)	ND	1.0	µg/L	1.0		9/23/05
Ethyl tert-butyl ether (ETBE)	ND	1.0	µg/L	1.0		9/23/05
Benzene	210	25	µg/L	50		9/23/05
Tert-amyl methyl ether (TAME)	ND	1.0	µg/L	1.0		9/23/05
Toluene	34	0.50	µg/L	1.0		9/23/05
Ethylbenzene	110	25	µg/L	50		9/23/05
m,p-Xylene	57	0.50	µg/L	1.0		9/23/05
o-Xylene	6.2	0.50	µg/L	1.0		9/23/05
Surrogate: 1,4-Dichlorobenzene-d4	96.3	80.8-139	% Rec	1.0		9/23/05

Test Name: TPH as Gasoline **Reference:** LUFT/EPA 8260B Modified

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gasoline	3,300	50	µg/L	1.0		9/23/05

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Project: 3888.01, Blue Lake Market

QC SUMMARY REPORT
Method Blank

Sample ID **MB 092205** Batch ID: **R37053** Test Code: **8260OXYW** Units: **µg/L** Analysis Date **9/22/05 7:11:00 AM** Prep Date

Client ID: Run ID: **ORGCMS2_050922B** SeqNo: **533306**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0									
Tert-butyl alcohol (TBA)	ND	10									
Di-isopropyl ether (DIPE)	ND	1.0									
Ethyl tert-butyl ether (ETBE)	ND	1.0									
Benzene	ND	0.50									
Tert-amyl methyl ether (TAME)	ND	1.0									
Toluene	ND	0.50									
Ethylbenzene	0.07377	0.50									J
m,p-Xylene	ND	0.50									
o-Xylene	0.1203	0.50									J
1,4-Dichlorobenzene-d4	0.907	0.10	1.00	0	90.7%	81	139	0			

Sample ID **MB-14278** Batch ID: **14278** Test Code: **BTXES** Units: **µg/g** Analysis Date **9/23/05 8:06:55 PM** Prep Date **9/23/05**

Client ID: Run ID: **ORGC8_050923B** SeqNo: **533977**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	ND	0.050									
Benzene	ND	0.0050									
Toluene	ND	0.0050									
Ethylbenzene	ND	0.0050									
m,p-Xylene	ND	0.0050									
o-Xylene	ND	0.0050									
Cis-1,2-Dichloroethylene	0.979	0.10	1.00	0	97.9%	72	135	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pvt. cust. paying on pickup
Work Order: 0509275
Project: 3888.01, Blue Lake Market

QC SUMMARY REPORT
Method Blank

Sample ID **MB 092205** Batch ID: **R37048** Test Code: **GASW-MS** Units: **µg/L** Analysis Date **9/22/05 7:11:00 AM** Prep Date
Client ID: Run ID: **ORGCMS2_050922A** SeqNo: **533270**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	ND	50									

Sample ID **MB-14278** Batch ID: **14278** Test Code: **TPHCGS** Units: **µg/g** Analysis Date **9/23/05 8:06:55 PM** Prep Date **9/23/05**
Client ID: Run ID: **ORGC8_050923A** SeqNo: **533924**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	0.3578	1.0									J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 27-Sep-05

CLIENT: Pvt. cust. paying on pickup
Work Order: 0509275
Project: 3888.01, Blue Lake Market

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID **LCS-05604** Batch ID: **R37053** Test Code: **8260OXYW** Units: **µg/L** Analysis Date **9/22/05 3:06:00 AM** Prep Date

Client ID: Run ID: **ORGCMS2_050922B** SeqNo: **533303**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18.66	1.0	20.0	0	93.3%	80	120	0			
Tert-butyl alcohol (TBA)	437.2	10	400	0	109%	25	162	0			
Di-isopropyl ether (DIPE)	18.52	1.0	20.0	0	92.6%	80	120	0			
Ethyl tert-butyl ether (ETBE)	18.98	1.0	20.0	0	94.9%	77	120	0			
Benzene	18.96	0.50	20.0	0	94.8%	78	117	0			
Tert-amyl methyl ether (TAME)	17.93	1.0	20.0	0	89.7%	64	136	0			
Toluene	18.73	0.50	20.0	0	93.7%	80	120	0			
Ethylbenzene	18.80	0.50	20.0	0	94.0%	80	120	0			
m,p-Xylene	37.12	0.50	40.0	0	92.8%	80	120	0			
o-Xylene	18.36	0.50	20.0	0	91.8%	80	120	0			
1,4-Dichlorobenzene-d4	1.02	0.10	1.00	0	102%	81	139	0			

Sample ID **LCSD-05604** Batch ID: **R37053** Test Code: **8260OXYW** Units: **µg/L** Analysis Date **9/22/05 3:37:00 AM** Prep Date

Client ID: Run ID: **ORGCMS2_050922B** SeqNo: **533304**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18.76	1.0	20.0	0	93.8%	80	120	18.7	0.574%	20	
Tert-butyl alcohol (TBA)	440.6	10	400	0	110%	25	162	437	0.765%	20	
Di-isopropyl ether (DIPE)	18.49	1.0	20.0	0	92.4%	80	120	18.5	0.157%	20	
Ethyl tert-butyl ether (ETBE)	19.25	1.0	20.0	0	96.2%	77	120	19.0	1.39%	20	
Benzene	18.52	0.50	20.0	0	92.6%	78	117	19.0	2.35%	20	
Tert-amyl methyl ether (TAME)	18.09	1.0	20.0	0	90.5%	64	136	17.9	0.898%	20	
Toluene	18.07	0.50	20.0	0	90.3%	80	120	18.7	3.60%	20	
Ethylbenzene	18.39	0.50	20.0	0	91.9%	80	120	18.8	2.25%	20	
m,p-Xylene	36.47	0.50	40.0	0	91.2%	80	120	37.1	1.78%	20	
o-Xylene	18.42	0.50	20.0	0	92.1%	80	120	18.4	0.370%	20	
1,4-Dichlorobenzene-d4	1.01	0.10	1.00	0	101%	81	139	1.02	0.957%	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pvt. cust. paying on pickup
Work Order: 0509275
Project: 3888.01, Blue Lake Market

QC SUMMARY REPORT
Laboratory Control Spike

Sample ID **LCS-14278** Batch ID: **14278** Test Code: **BTXES** Units: **µg/g** Analysis Date **9/23/05 5:06:20 PM** Prep Date **9/23/05**
Client ID: Run ID: **ORGC8_050923B** SeqNo: **533975**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	0.3801	0.050	0.400	0	95.0%	75	124	0			
Benzene	0.05079	0.0050	0.0500	0	102%	80	128	0			
Toluene	0.05681	0.0050	0.0500	0	114%	85	126	0			
Ethylbenzene	0.05066	0.0050	0.0500	0	101%	80	126	0			
m,p-Xylene	0.09660	0.0050	0.100	0	96.6%	84	130	0			
o-Xylene	0.04848	0.0050	0.0500	0	97.0%	84	125	0			
Cis-1,2-Dichloroethylene	1.14	0.10	1.00	0	114%	72	135	0			

Sample ID **LCSD-14278** Batch ID: **14278** Test Code: **BTXES** Units: **µg/g** Analysis Date **9/23/05 5:42:46 PM** Prep Date **9/23/05**
Client ID: Run ID: **ORGC8_050923B** SeqNo: **533976**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	0.3799	0.050	0.400	0	95.0%	75	124	0.380	0.0536%	15	
Benzene	0.05047	0.0050	0.0500	0	101%	80	128	0.0508	0.640%	15	
Toluene	0.05635	0.0050	0.0500	0	113%	85	126	0.0568	0.801%	15	
Ethylbenzene	0.05055	0.0050	0.0500	0	101%	80	126	0.0507	0.222%	15	
m,p-Xylene	0.09626	0.0050	0.100	0	96.3%	84	130	0.0966	0.347%	15	
o-Xylene	0.04851	0.0050	0.0500	0	97.0%	84	125	0.0485	0.0563%	15	
Cis-1,2-Dichloroethylene	1.12	0.10	1.00	0	112%	72	135	1.14	1.35%	15	

Sample ID **LCS-05605** Batch ID: **R37048** Test Code: **GASW-MS** Units: **µg/L** Analysis Date **9/22/05 5:09:00 AM** Prep Date
Client ID: Run ID: **ORGCMS2_050922A** SeqNo: **533267**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	1,040	50	1,000	0	104%	80	120	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pvt. cust. paying on pickup
Work Order: 0509275
Project: 3888.01, Blue Lake Market

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD-05605** Batch ID: **R37048** Test Code: **GASW-MS** Units: **µg/L** Analysis Date **9/22/05 5:40:00 AM** Prep Date
Client ID: Run ID: **ORGCMS2_050922A** SeqNo: **533268**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	1,034	50	1,000	0	103%	80	120	1,040	0.581%	20	

Sample ID **LCS-14278-G** Batch ID: **14278** Test Code: **TPHCGS** Units: **µg/g** Analysis Date **9/23/05 6:19:08 PM** Prep Date **9/23/05**
Client ID: Run ID: **ORGC8_050923A** SeqNo: **533922**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	11.62	1.0	10.0	0	116%	102	128	0			

Sample ID **LCSD-14278-G** Batch ID: **14278** Test Code: **TPHCGS** Units: **µg/g** Analysis Date **9/23/05 6:55:20 PM** Prep Date **9/23/05**
Client ID: Run ID: **ORGC8_050923A** SeqNo: **533923**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	11.58	1.0	10.0	0	116%	102	128	11.6	0.359%	15	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

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Chain of Custody

LABORATORY NUMBER: 0509275

T0602300170

Attention: Pat Folkins
Results & Invoice to:
Address: 2020 Ardagh Ct. Eureka, CA 95503
Phone:
Copies of Report to: Tim Nelson - LACO
Sampler (Sign & Print): Todd B. Becker

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☒ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☒ Verbal ☐ By: __/__/__
Final Report: FAX ☐ Verbal ☐ By: __/__/__

PROJECT INFORMATION
Project Number: 3888.01
Project Name: Blue Lake Market
Purchase Order Number:

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	CONTAINER	PRESERVATIVE	ANALYSIS
	3888-B11-S4	9/13/05	AM	S	13	4°C	8260 List 1 / TPH-g/BTEX/MTBE
	3888-B11-S8	"	"	S	9	B	
	3888-B11-S11.5	"	"	S	1		
	3888-B11-S15.5	"	"	S	1		
	3888-B11-W	"	"	GW	3		
	3888-B12-S4	"	"	S	1		
	3888-B12-S8	"	"	S	1		
	3888-B12-S12	"	"	S	1		
	3888-B12-S16	"	"	S	1		
	3888-B12-W	↓	↓	GW	3		

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

3888-B11
3888-B11
3888-B11
3888-B11
3888-B11
3888-B12
3888-B12
3888-B12
3888-B12
3888-B12

Cooler temp= 14.6°C

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
Todd B. Becker	9/15/05 13:25		9-15-05 13:25

SAMPLE DISPOSAL
☒ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

PTV

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

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5680 West End Road · Arcata · CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

050927S

LABORATORY NUMBER:

Attention: Pat Folkins
Results & Invoice to:
Address: 2020 Ardagh Ct
Eureka, CA 95503
Phone:
Copies of Report to: Tim Nelson – LACO
Sampler (Sign & Print): [signature] Todd B. Becker

PROJECT INFORMATION

Project Number: 3888.01
Project Name: Blue Lake Market
Purchase Order Number:

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day ☒ STD (2–3 Wk) ☐ Other:

PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☒ Verbal ☐ By: _/_/_
Final Report: FAX ☐ Verbal ☐ By: _/_/_

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

PRESERVATIVE					4°C	R	
CONTAINER					13	9	
ANALYSIS					~~8260 List~~	8260 List	TPHg/diesel/motor
LAB ID	**SAMPLE ID**	**DATE**	**TIME**	**MATRIX***			
	3888-B13-S1.6	9/13/05	PM	S	1		
	3888-B13-S8	↓	↓	S	1		
	3888-B13-W	↓	↓	GW		3	
	3888-B13-S10	↓	↓	S	1		
	3888-B13-S12	↓	↓	S	1		
	3888-B13-S13.5	↓	↓	S	1		
	3888-B13-S16	↓	↓	S			

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

3888-B13 (HOT)
3888-B13
3888-B13
3888-B13
3888-B13
3888-B13
3888-B13 ↓

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
[signature] Todd B. Becker	9/15/05 13:25	[signature]	9-15-05 1326

SAMPLE DISPOSAL
☒ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

*MATRIX: DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

T0602301170

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707-822-4649 Fax 707-822-6831

Chain of Custody

0509275

LABORATORY NUMBER:

Attention: Pat Folkins
Results & Invoice to:
Address: 2020 Ardagh Ct
Eureka, CA 95503
Phone:
Copies of Report to: Tim Nelson - LACO

Sampler (Sign & Print): [signature] Todd B. Beeler

PROJECT INFORMATION

Project Number: 3888.01
Project Name: Blue Lake Market
Purchase Order Number:

PRESERVATIVE	40c	B
CONTAINER	13	9
ANALYSIS	~~8260~~	B260Lol TPHg/BTEX/MTBE

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	Analysis 1	Analysis 2	SAMPLE CONDITION/SPECIAL INSTRUCTIONS
	3888-B14-S4	9/13/05	DM	S	1		3888-B14
	3888-B14-S8	↓	↓	S	1		3888-B14
	3888-B14-S10	↓	↓	S	1		3888-B14 (HOT)
	3888-B14-S11	↓	↓	S	1		3888-B14 ↓
	3888-B14-S14	↓	↓	S	1		3888-B14 ↓
	3888-B14-S16	↓	↓	S	1		3888-B14 ↓
	3888-B14-W	↓	↓	GW		3	3888-B14 ↓

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
[signature] Todd B. Beeler	7/15/05 13:25	[signature]	7-15-0 1330

SAMPLE DISPOSAL
☒ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☒ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☒ Verbal ☐ By: / /
Final Report: FAX ☐ Verbal ☐ By: / /

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

T0602300170

NORTH COAST
LABORATORIES LTD.

RECEIVED
LACO ASSOCIATES
SEP 2 8 2005
BY: JG

September 28, 2005

Pvt. cust. paying on pickup

DRG

TDN

Attn: Pat Folkins

RE: 3888.01, Blue Lake Market

Order No.: 0509271
Invoice No.: 53132
PO No.:
ELAP No. 1247-Expires July 2006

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	3888-MW4-S8
02A	3888-MW4-S12
03A	3888-MW4-S14
04A	3888-MW4-S16
05A	3888-MW5-S4
06A	3888-MW5-S8
07A	3888-MW5-S12
08A	3888-MW5-S16

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s) | QA Unit | Jesse G. Chaney, Jr. Laboratory Director

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Printed on Recycled Paper

CLIENT: Pvt. cust. paying on pickup
Project: 3888.01, Blue Lake Market
Lab Order: 0509271

CASE NARRATIVE

TPH as Gasoline:
Samples 3888-MW5-S4 and 3888-MW5-S16 do not present a peak pattern consistent with that of gasoline. The reported results represent the amount of material in the gasoline range.

The gasoline values for samples 3888-MW4-S14 and 3888-MW4-S16 include the reported gasoline components in addition to other peaks in the gasoline range.

BTEX:
Some reporting limits were raised for samples 3888-MW4-S14, 3888-MW4-S16 and 3888-MW5-S16 due to matrix interference.

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Date: 28-Sep-05
WorkOrder: 0509271

ANALYTICAL REPORT

Client Sample ID: 3888-MW4-S8 **Received:** 9/15/05 **Collected:** 9/14/05 0:00
Lab ID: 0509271-01A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/26/05	9/26/05
Benzene	ND	0.0050	µg/g	1.0	9/26/05	9/26/05
Toluene	0.0072	0.0050	µg/g	1.0	9/26/05	9/26/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/26/05	9/26/05
m,p-Xylene	0.011	0.0050	µg/g	1.0	9/26/05	9/26/05
o-Xylene	0.0052	0.0050	µg/g	1.0	9/26/05	9/26/05
Surrogate: Cis-1,2-Dichloroethylene	102	71.8-135	% Rec	1.0	9/26/05	9/26/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	9/26/05	9/26/05

Client Sample ID: 3888-MW4-S12 **Received:** 9/15/05 **Collected:** 9/14/05 0:00
Lab ID: 0509271-02A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/26/05	9/26/05
Benzene	ND	0.0050	µg/g	1.0	9/26/05	9/26/05
Toluene	ND	0.0050	µg/g	1.0	9/26/05	9/26/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/26/05	9/26/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/26/05	9/26/05
o-Xylene	ND	0.0050	µg/g	1.0	9/26/05	9/26/05
Surrogate: Cis-1,2-Dichloroethylene	101	71.8-135	% Rec	1.0	9/26/05	9/26/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	9/26/05	9/26/05

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Date: 28-Sep-05
WorkOrder: 0509271

ANALYTICAL REPORT

Client Sample ID: 3888-MW4-S14 **Received:** 9/15/05 **Collected:** 9/14/05 0:00
Lab ID: 0509271-03A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/26/05	9/27/05
Benzene	0.012	0.0050	µg/g	1.0	9/26/05	9/27/05
Toluene	0.023	0.0050	µg/g	1.0	9/26/05	9/27/05
Ethylbenzene	0.047	0.0050	µg/g	1.0	9/26/05	9/27/05
m,p-Xylene	0.029	0.0050	µg/g	1.0	9/26/05	9/27/05
o-Xylene	ND	0.010	µg/g	1.0	9/26/05	9/27/05
Surrogate: Cis-1,2-Dichloroethylene	102	71.8-135	% Rec	1.0	9/26/05	9/27/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	6.6	1.0	µg/g	1.0	9/26/05	9/27/05

Client Sample ID: 3888-MW4-S16 **Received:** 9/15/05 **Collected:** 9/14/05 0:00
Lab ID: 0509271-04A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/26/05	9/26/05
Benzene	ND	0.0050	µg/g	1.0	9/26/05	9/26/05
Toluene	ND	0.015	µg/g	1.0	9/26/05	9/26/05
Ethylbenzene	0.0085	0.0050	µg/g	1.0	9/26/05	9/26/05
m,p-Xylene	0.012	0.0050	µg/g	1.0	9/26/05	9/26/05
o-Xylene	ND	0.010	µg/g	1.0	9/26/05	9/26/05
Surrogate: Cis-1,2-Dichloroethylene	99.2	71.8-135	% Rec	1.0	9/26/05	9/26/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1.3	1.0	µg/g	1.0	9/26/05	9/26/05

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Date: 28-Sep-05
WorkOrder: 0509271

ANALYTICAL REPORT

Client Sample ID: 3888-MW5-S4 **Received:** 9/15/05 **Collected:** 9/14/05 0:00
Lab ID: 0509271-05A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/26/05	9/27/05
Benzene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
Toluene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
o-Xylene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
Surrogate: Cis-1,2-Dichloroethylene	100	71.8-135	% Rec	1.0	9/26/05	9/27/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	2.8	1.0	µg/g	1.0	9/26/05	9/27/05

Client Sample ID: 3888-MW5-S8 **Received:** 9/15/05 **Collected:** 9/14/05 0:00
Lab ID: 0509271-06A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/26/05	9/27/05
Benzene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
Toluene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
o-Xylene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
Surrogate: Cis-1,2-Dichloroethylene	99.8	71.8-135	% Rec	1.0	9/26/05	9/27/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	9/26/05	9/27/05

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Date: 28-Sep-05
WorkOrder: 0509271

ANALYTICAL REPORT

Client Sample ID: 3888-MW5-S12 **Received:** 9/15/05 **Collected:** 9/14/05 0:00
Lab ID: 0509271-07A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/26/05	9/27/05
Benzene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
Toluene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
Ethylbenzene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
o-Xylene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
Surrogate: Cis-1,2-Dichloroethylene	99.0	71.8-135	% Rec	1.0	9/26/05	9/27/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	ND	1.0	µg/g	1.0	9/26/05	9/27/05

Client Sample ID: 3888-MW5-S16 **Received:** 9/15/05 **Collected:** 9/14/05 0:00
Lab ID: 0509271-08A

Test Name: BTEX **Reference:** EPA 5035/EPA 8021B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
MTBE	ND	0.050	µg/g	1.0	9/26/05	9/27/05
Benzene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
Toluene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
Ethylbenzene	ND	0.020	µg/g	1.0	9/26/05	9/27/05
m,p-Xylene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
o-Xylene	ND	0.0050	µg/g	1.0	9/26/05	9/27/05
Surrogate: Cis-1,2-Dichloroethylene	91.6	71.8-135	% Rec	1.0	9/26/05	9/27/05

Test Name: TPH as Gasoline **Reference:** EPA 5035/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPHC Gas (C6-C14)	1.5	1.0	µg/g	1.0	9/26/05	9/27/05

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North Coast Laboratories, Ltd.

Date: 28-Sep-05

CLIENT: Pvt. cust. paying on pickup
Work Order: 0509271
Project: 3888.01, Blue Lake Market

QC SUMMARY REPORT

Method Blank

Sample ID **MB-14288** Batch ID: **14288** Test Code: **BTXES** Units: **µg/g** Analysis Date **9/26/05 9:39:43 PM** Prep Date **9/26/05**
Client ID: Run ID: **ORGC8_050926B** SeqNo: **534049**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	0.02812	0.050									J
Benzene	ND	0.0050									
Toluene	ND	0.0050									
Ethylbenzene	ND	0.0050									
m,p-Xylene	ND	0.0050									
o-Xylene	ND	0.0050									
Cis-1,2-Dichloroethylene	0.973	0.10	1.00	0	97.3%	72	135	0			

Sample ID **MB-14288** Batch ID: **14288** Test Code: **TPHCGS** Units: **µg/g** Analysis Date **9/26/05 9:39:43 PM** Prep Date **9/26/05**
Client ID: Run ID: **ORGC8_050926A** SeqNo: **534031**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	0.4787	1.0									J

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 28-Sep-05

CLIENT: Pvt. cust. paying on pickup
Work Order: 0509271
Project: 3888.01, Blue Lake Market

QC SUMMARY REPORT
Laboratory Control Spike

Sample ID **LCS-14288** Batch ID: **14288** Test Code: **BTXES** Units: **µg/g** Analysis Date **9/26/05 6:41:35 PM** Prep Date **9/26/05**
Client ID: Run ID: **ORGC8_050926B** SeqNo: **534047**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	0.3728	0.050	0.400	0	93.2%	75	124	0			
Benzene	0.04993	0.0050	0.0500	0	99.9%	80	128	0			
Toluene	0.05495	0.0050	0.0500	0	110%	85	126	0			
Ethylbenzene	0.05080	0.0050	0.0500	0	102%	80	126	0			
m,p-Xylene	0.09883	0.0050	0.100	0	98.8%	84	130	0			
o-Xylene	0.05030	0.0050	0.0500	0	101%	84	125	0			
Cis-1,2-Dichloroethylene	1.11	0.10	1.00	0	111%	72	135	0			

Sample ID **LCSD-14288** Batch ID: **14288** Test Code: **BTXES** Units: **µg/g** Analysis Date **9/26/05 7:17:35 PM** Prep Date **9/26/05**
Client ID: Run ID: **ORGC8_050926B** SeqNo: **534048**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
MTBE	0.3821	0.050	0.400	0	95.5%	75	124	0.373	2.47%	15	
Benzene	0.05041	0.0050	0.0500	0	101%	80	128	0.0499	0.962%	15	
Toluene	0.05478	0.0050	0.0500	0	110%	85	126	0.0550	0.316%	15	
Ethylbenzene	0.05128	0.0050	0.0500	0	103%	80	126	0.0508	0.935%	15	
m,p-Xylene	0.09865	0.0050	0.100	0	98.6%	84	130	0.0988	0.187%	15	
o-Xylene	0.04959	0.0050	0.0500	0	99.2%	84	125	0.0503	1.41%	15	
Cis-1,2-Dichloroethylene	1.06	0.10	1.00	0	106%	72	135	1.11	4.46%	15	

Sample ID **LCS-14288-G** Batch ID: **14288** Test Code: **TPHCGS** Units: **µg/g** Analysis Date **9/26/05 7:53:19 PM** Prep Date **9/26/05**
Client ID: Run ID: **ORGC8_050926A** SeqNo: **534029**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	11.66	1.0	10.0	0	117%	102	128	0			

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pvt. cust. paying on pickup
Work Order: 0509271
Project: 3888.01, Blue Lake Market

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

Sample ID **LCSD-14288-G** Batch ID: **14288** Test Code: **TPHCGS** Units: **µg/g** Analysis Date **9/26/05 8:28:53 PM** Prep Date **9/26/05**
Client ID: Run ID: **ORGC8_050926A** SeqNo: **534030**

Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	11.62	1.0	10.0	0	116%	102	128	11.7	0.341%	15	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

NORTH COAST LABORATORIES LTD.
5680 West End Road • Arcata • CA 95521-9202
707-822-4649 Fax 707-822-6831

Chain of Custody

LABORATORY NUMBER: 0509271

Attention: Pat Folkins
Results & Invoice to:
Address: 2020 Ardath Ct. Eureka, CA 95503
Phone:
Copies of Report to: Tim Nelson - LACO

Sampler (Sign & Print): Todd B. Decker

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5–7 Day
☒ STD (2–3 Wk) ☐ Other:
PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐
Preliminary: FAX ☒ Verbal ☐ By: __/__/__
Final Report: FAX ☐ Verbal ☐ By: __/__/__

PROJECT INFORMATION
Project Number: 3888.01
Project Name: Blue Lake Market
Purchase Order Number:

LAB ID	SAMPLE ID	DATE	TIME	MATRIX*	CONTAINER	PRESERVATIVE	ANALYSIS
	3888-MW4-S8	9/14/05	AM	S	1	4°C	TPH-g/BTEX/MTBE
	3888-MW4-S12			S	1		
	3888-MW4-S14			S	1		
	3888-MW4-S16		↓	S	1		
	3888-MW5-S4		PM	S	1		
	3888-MW5-S8			S	1		
	3888-MW5-S12	↓	↓	S	1		
	3888-MW5-S16			S	1		

7602300178

CONTAINER CODES: 1—½ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

PRESERVATIVE CODES: a—HNO_3; b—HCl; c—H_2SO_4; d—$Na_2S_2O_3$; e—NaOH; f—$C_2H_3O_2Cl$; g—other

SAMPLE CONDITION/SPECIAL INSTRUCTIONS

3888-MW4
3888-MW4
3888-MW4
3888-MW4
3888-MW5
3888-MW5
3888-MW5
3888-MW5

cooler temp = 4.6 C

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
Todd B. Decker	9/15/05 13:25	Jennifer Mc A-	9-15-05 1320

SAMPLE DISPOSAL
☑ NCL Disposal of Non-Contaminated
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

PU

***MATRIX:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

Attachment 3

LACO ASSOCIATES
ENGINEERING
P.O. Box 1023 · Eureka, California 95502 · 707.443.5054

WELL DEVELOPMENT RECORD

Project Name: Blue Lake Market Project No.: 3888.01

Well ID: MW #4 Date Installed: _____

Contractor: Laco Development Contractor: Laco

Casing Diameter: 1.5"

METHOD OF DEVELOPMENT

☐ Swabbing ☐ Bailing ☒ Pumping ☐ Describe _____

Equipment decontaminated prior to development ☒ Yes ☐ No

Describe _____

CASING VOLUME INFORMATION

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION

Measured Well Depth (B) 14.25 ft.

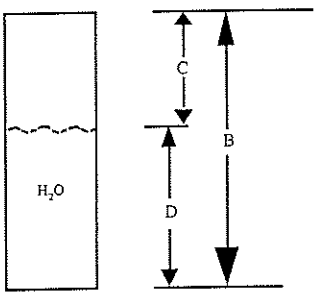
Measured Water Level Depth (C) 12.35 ft.

Length of Static Water Column (D) 14.25 (B) - 12.35 (C) = 1.90 ft.

Casing Water Volume 0.09 (A) x 1.09 (D) = 0.171 gal

Volume of Water Added to Well During Installation = 25 gal

Total Purge Volume = 25.5 (gal)



Time	Pump Rate	Water Level Depth (ft)	Volume Removed (gal)	pH	Cond (mS/cm)	Temperature F or C	Turbidity (NTU)	Comments

Developer Signature: _____ Date: 9/26/05

LACO ASSOCIATES
P.O. Box 1023 · Eureka, California 95502 · 707.443.5054

WELL DEVELOPMENT RECORD

SHEET 3 of 3

Project Name: Blue Lake Market
Project No.: 3888.01
Well ID: MW#5
Date Installed:
Contractor: Laco
Development Contractor: Laco
Casing Diameter: 1.5"

METHOD OF DEVELOPMENT

☐ Swabbing ☐ Bailing ☑ Pumping ☐ Describe

Equipment decontaminated prior to development ☒ Yes ☐ No

Describe

CASING VOLUME INFORMATION

Casing ID (inch)	1.0	1.5	2.0	2.2	3.0	4.0	4.3	5.0	6.0	7.0	8.0
Unit Casing Volume (A) (gal/ft)	0.04	0.09	0.16	0.2	0.37	0.65	0.75	1.0	1.5	2.0	2.6

PURGING INFORMATION

Measured Well Depth (B) 14.45 ft.

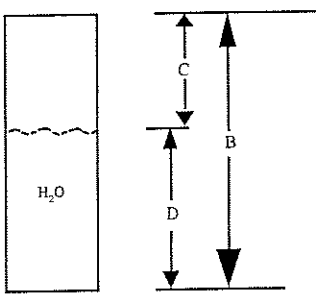
Measured Water Level Depth (C) 13.38 ft.

Length of Static Water Column (D) 14.45 (B) - 13.38 (C) = 1.07 ft.

Casing Water Volume 0.09 (A) x 1.07 (D) = 0.0963 gal

Volume of Water Added to Well During Installation = 15 gal

Total Purge Volume = 18.5 (gal)

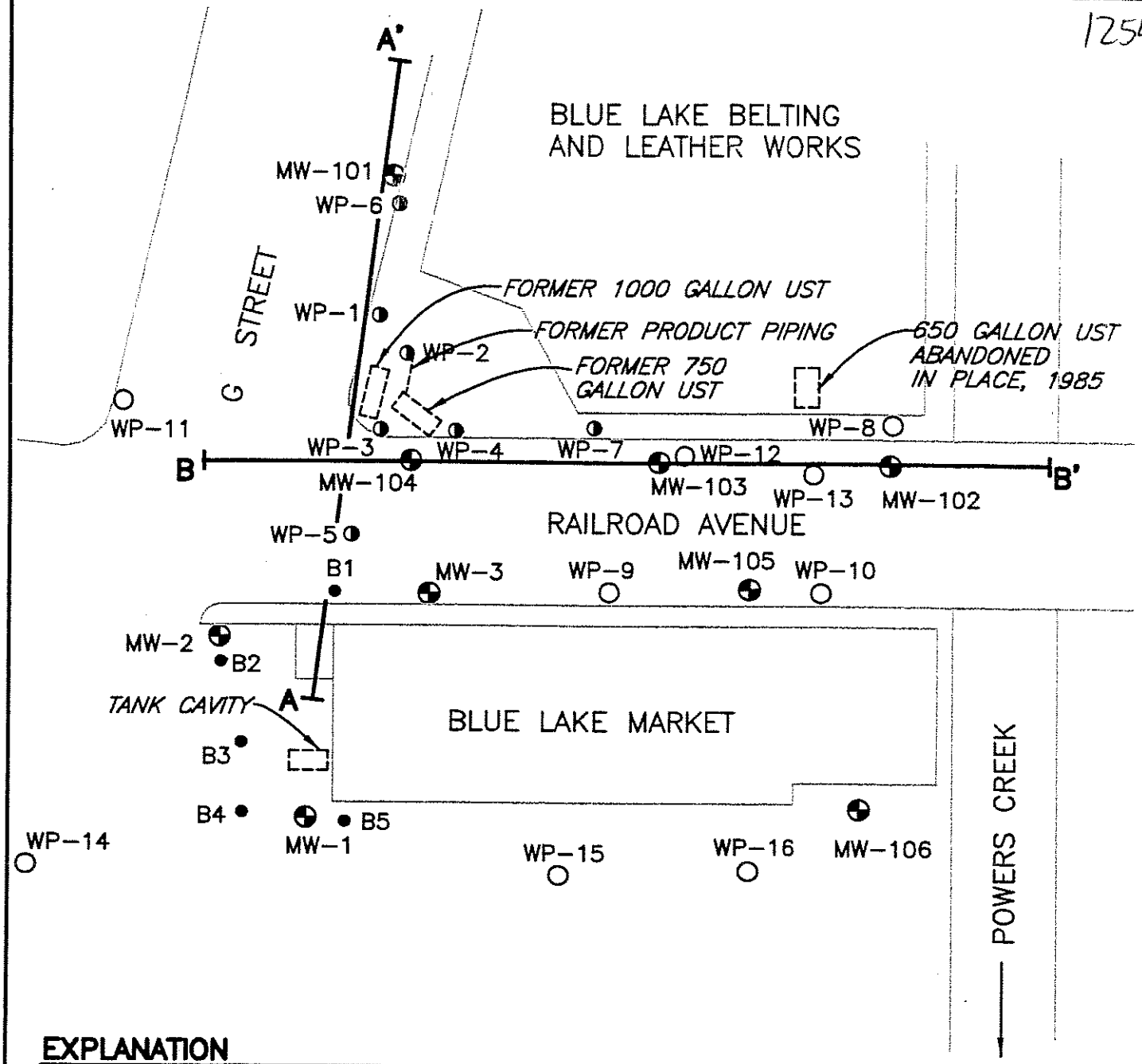


Time	Pump Rate	Water Level Depth (ft)	Volume Removed (gal)	pH	Cond (mS/cm)	Temperature F or C	Turbidity (NTU)	Comments
10:30	.5	14.21	10	/	/	/	>100	S.Hy/sand
11:00	0.067	12.26	2.0				>100	Turbid
11:30	0.05	11.61	1.5				>100	Turbid
12:00	0.05	11.60	1.5				>100	Turbid
12:30	0.05	11.63	1.5				>100	Turbid
1:00	0.067	11.65	2.0				>100	Turbid

Developer Signature: Date: 9/26/05

Attachment 4

1254L

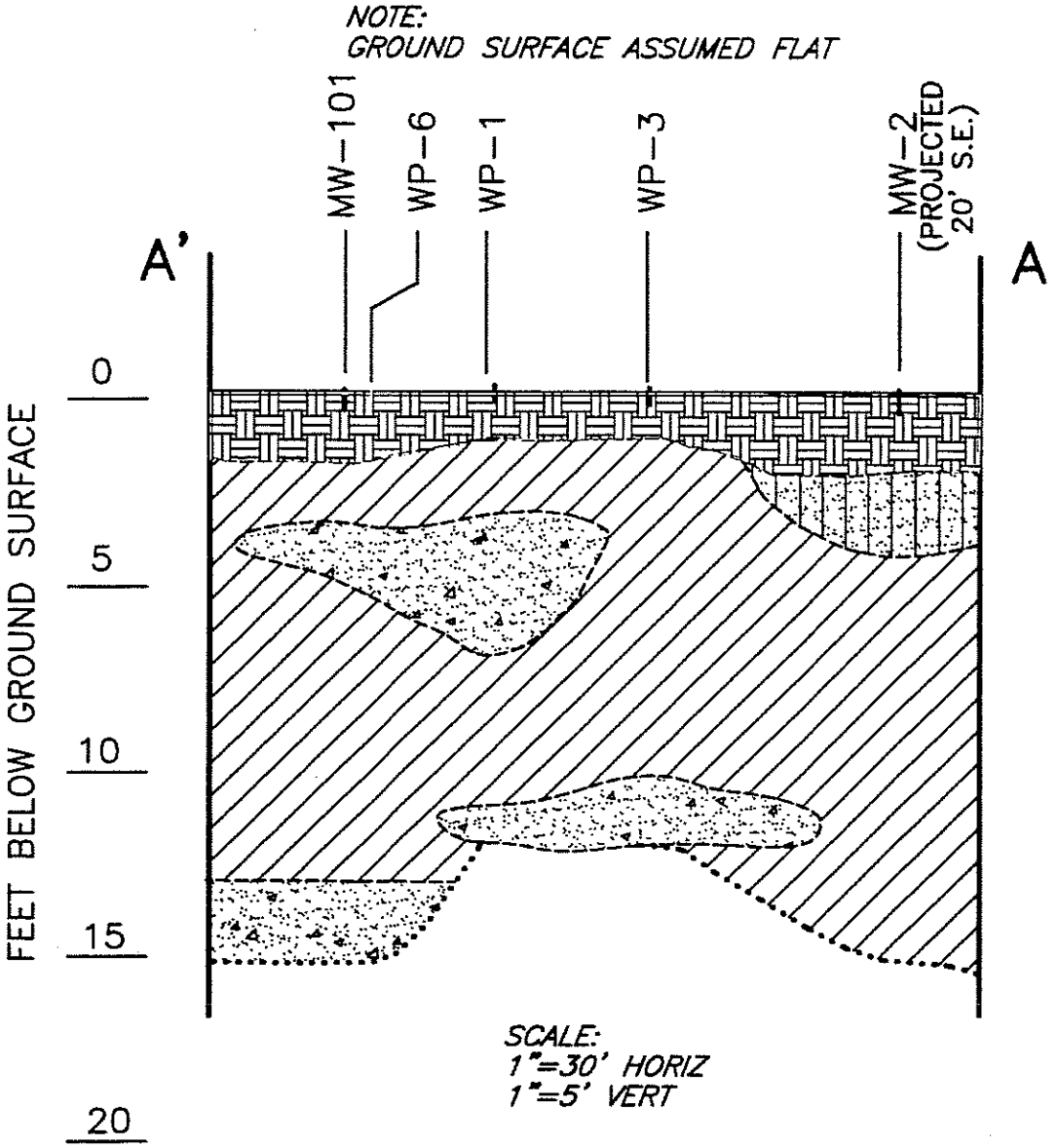


EXPLANATION

MW-1 ◓	*MONITORING WELL LOCATION AND DESIGNATION*
⬚	*FORMER UST LOCATION*
B4 ●	*BORING LOCATION AND DESIGNATION (LACO)*
WP-7 ◑	*WELL POINT LOCATION AND DESIGNATION (SHN 5/13/98)*
WP-9 ○	*WELL POINT LOCATION AND DESIGNATION (SHN 2/1/98)*

1"=30'

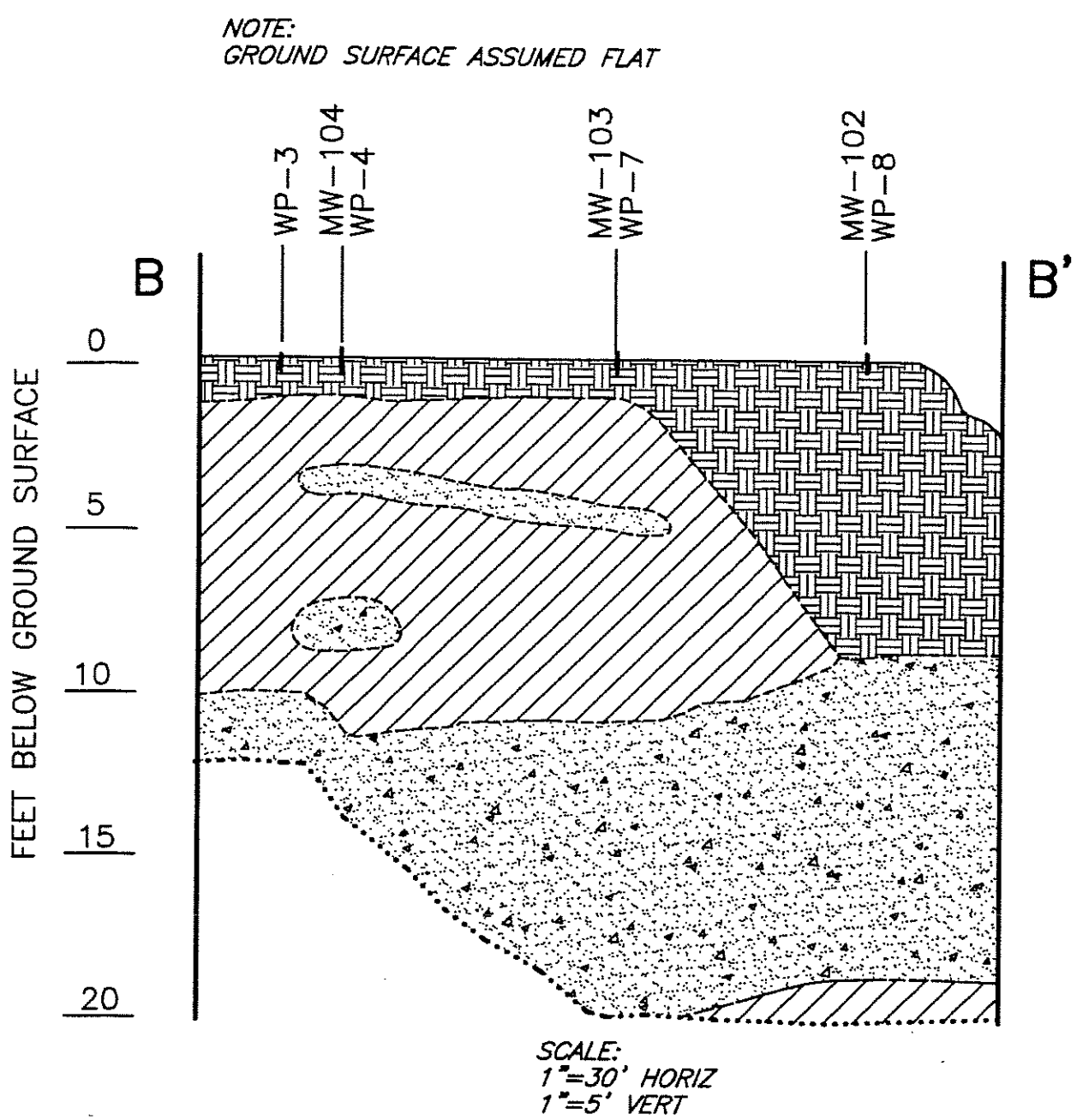
SHN Consulting Engineers & Geologists, Inc.	BLUE LAKE BELTING AND LEATHER WORKS BLUE LAKE, CALIFORNIA		SITE PLAN SHN 097309
	MARCH 2003	097309-SI1	FIGURE 2



EXPLANATION

- FILL MATERIAL
- SILTS AND CLAYS
- SANDY GRAVELS
- SILTY SAND

Consulting Engineers & Geologists, Inc.	Blue Lake Belting And Leather Works Blue Lake, California	Generalized Cross Section A-A' SHN 097309	
	May, 2003	097309-sect-aa	Figure 1



SHN Consulting Engineers & Geologists, Inc.	Blue Lake Belting And Leather Works Blue Lake, California	Generalized Cross Section B-B' SHN 097309	
	May, 2003	097309-sect-bb	Figure 2